THE CULTIVATOR.

THIRD — To Improve the Soil and the Mind. — SERIES

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The Close of Another Year.

It is customary to speak of the present age as one of Associated Effort—an age in which, more than ever before, improvements are pushed on and progress is effected, by the combined exertions of thousands, working through simple and effective agencies previously unknown.

No example of this is more in point than that afforded by our Agriculture. Through Societies and the Agricultural Press its followers have already been largely awakened to the importance of their calling; to the best means of increasing its profits and its comforts; to the necessity of activity in mind as well as in body; to the enjoyment of the pleasures of taste, as well as the enlargement of the money results of their labor.

The Agricultural Press is the product of Associated Effort in a double sense. It elicits from its readers their practical experience, and publishes this experience to others. The Agricultural Paper is thus rendered a monthly or a weekly Meeting for discussion, between farmers, near and remote, skillful and ignorant, old and young—still, each of them striving for and contributing toward the same end, the mutual benefit of all—throwing out the lessons of an earnest life, as an example or a warning to others, according as its fruits may prove to have been good or evil.

The second sense in which such a paper as THE CULTIVATOR may be regarded as the product of Associated Effort is this: It is offered at the lowest possible price to every subscriber—a price which gives him the whole advantage of the commission or reduction that would be offered to Agents upon a higher price, and one, too, that renders it necessary for a very large subscription to cover the actual cost of production. Hence the circulation of THE CULTIVATOR we are forced to place entirely in the hands of its readers. We say to them:

"This is the aggregate of your monthly in-gathering of facts, experiences and opinions. Everything that we can do to render these contributions serviceable to you—whatever we can add from the constant labors of our own lives—whatever money or time or effort can procure—all this we put into the common stock. The larger the circulation you can aid us in attaining—in just this proportion will our exertions be rendered effective, and the value and interest of your journal and ours be maintained and extended. You have the means of reaching many thousands, by laying the subject individually before a few. We offer you all the attractions we can; and we invite your support—not merely to the limit of your own single subscription,—but in the shape of a little time and exertion in extending our invitation to ten or twenty or thirty of your friends."

Political papers which have in charge the advancement of party interests, find agents at every corner ready to enroll clubs of subscribers and to keep them up, at the cost even of some money as well as time and trouble. But is there nothing to be gained in extending the benefit of Agricultural reading? is there nothing in the cause of Agricultural progress worthy of sincere, united, hearty efforts to advance it?

In pursuance of the system we have so long followed, THE CULTIVATOR will open the year 1859 with new subscription books, and the time to fill them is now close at hand. This journal will continue to occupy much the same field as at present. Its course for 25 years has been one that warrants us in promising that it will not fall behind in the future, while at the same time it frees us from the necessity of making novel announcements, and issuing startling extras. Unbiassed by any connection with secondary concerns, the conductors aim to identify their own interests with those of their readers, and appeal to the testimony of every thoughtful observer as to the influence THE CULTIVATOR has wielded and is every day wielding upon the husbandry and consequently upon the prosperity of the country, even in parts the most remote.

The past year may be especially referred to, as one that has elicited articles of constant interest and value from a host of instructive correspondents. This and other circumstances of encouragement, lead us to look with confidence to 1859—not only as a year that shall maintain and extend whatever meri's the quarter of a century which the CULTIVATOR now concludes, can boast,—but one also which shall enlarge its sphere of usefulness, and bring new thousands within the reach and the reading of its columns. Men of great intellect and ability are now devoting labor and time to the investigation of agricultural science. Men of wealth are more than ever giving up the pleasures and the pursuits of the city for those afforded by country life—or training their sons to do so. The most skillful mechanics are at work in the service of Agriculture. Those farmers who have made it the business of years and derived from it competencies or fortunes, are constantly growing readier to contribute their counsels and advice. One must take a good Agricultural Journal to be up with the times in what is going on through these and other channels. In none we claim can he obtain

a more complete transcript of that world of events in which the Farmer is especially interested, at so small a cost, as in THE CULTIVATOR; and we are inclined to believe that there is no neighborhood in which there could not be found scores or hundreds of intelligent farmers glad to possess themselves of it, if the matter was properly laid before them.

With the above remarks, to which we ask the thoughtful attention of our readers, we introduce a statement of our terms for 1859. We are already indebted to agents in all parts of the country, and to many constant friends of 10, or 15, or 20, or 25 years' standing, for their kind and in some cases self-sacrificing efforts to promote the circulation of our journals. We ask them to continue their assistance and support, and we ask those readers with whom we have more lately come in contact, to join with them and us in this good cause. We will send a copy of THE REGISTER OF RURAL AFFAIRS for 1859 to any one who will employ it in procuring subscriptions, on application to that effect, and we think if this is widely shown, with the explanation that *a Twenty-five cent Book, containing nearly one hundred and fifty engravings*, may be had together with THE CULTIVATOR one year, for *Fifty-two Cents*, few will refuse a sum so trifling. We have already mailed a copy to most of our old agents, but some may miscarry or be accidentally overlooked—if so, will they please inform us?

We have determined, instead of increasing our cash premiums to Agents, to make an offer which will cost us more, but which will be extending some little remuneration to the great body of those from whose aid we are hoping for an enlargement of our lists next year:—

1. *We will give a copy of* THE CULTIVATOR *and* REGISTER *for* 1859, FREE *to every one who sends us* $5 *for a club of Ten subscribers, and the postages* (22 *cents,*) *which we have to pay on the Eleven Registers.*
2. *We will give a copy of either* THOMAS' FRUIT CULTURIST, THOMAS' FARM IMPLEMENTS, *the bound volume of* RURAL AFFAIRS, *a previous bound vol of* THE CULTIVATOR, *or any other* $1 *book, to the one sending us* $10 *for Twenty copies* CULTIVATOR *and* REGISTER *for* 1859, *and* 40 *cents to meet the postages on the Twenty Registers.*

Terms of Cultivator and Register for 1859.

One copy Cultivator and Register, ... 75 cents.
One copy Cultivator alone, ... 50 cents.
Ten copies Cultivator and Register, . $5 20

N. B. Subscribers in the British Provinces will add 6 cents a copy to the above terms, to cover U. S. postage to the lines. To them 10 copies of THE CULTIVATOR and REGISTER will cost $5 80.

We need not remind our friends of the importance of *beginning early* to make out their lists. We will send the REGISTERS out to subscribers as heretofore, as soon as the orders are received, so that one who subscribes for the CULTIVATOR for 1859, *will immediately receive back Twenty-five Cents of his money in the form of this valuable book.*

The Country Gentleman.

Subscribers to THE CULTIVATOR who would prefer a weekly journal, are reminded that THE COUNTRY GENTLEMAN will begin its 13th vol. with 1859. THE CULTIVATOR is made up of a portion of its contents, and the COUNTRY GENTLEMAN is referred to with confidence as standing at the head of our weekly Agricultural periodicals. It contains 16 large pages every week—making two yearly volumes (beginning respectively with January and July,) of over 400 pages each! furnished at the low price of $2 a year, or $2 50 when not paid in advance. Subscriptions commence at any time.

The Country Gentleman and the Annual Register.

The price of a SINGLE COPY of each, to one person, is $2 25; TWO COPIES, $4 00; FOUR COPIES, $7.08; EIGHT COPIES, $13.16; and any larger number at the same rate, which includes the postage on the REGISTER. Where, however, the subscribers are already supplied with the REGISTER, or do not wish it, we will send the COUNTRY GENTLEMAN alone as follows:—THREE COPIES for $5; FIVE COPIES, $8; TEN COPIES, $15. SUBSCRIBERS IN THE BRITISH PROVINCES will add Twenty-six Cents a Year to the above Terms, to cover United States postage to the Canada Lines.

"RURAL AFFAIRS"—Volume One.

Under this title we have issued a new edition of the "ANNUAL RREGISTER OF RURAL AFFAIRS," for 1855, 1856, and 1857, in one volume, handsomely bound—price *One Dollar*. The Calendar pages and advertisements which originally appeared, are now omitted, but the difference in size is more than made up in the weight and quality of the paper. It forms the most beautiful and complete Museum on all Rural Subjects, ever issued at the price, and contains 440 Engravings! Agents are wanted in all parts of the country, to sell this book, to whom liberal terms will be given.

To Cure a Ham.

[This and the following receipt we are enabled to give through the kindness of a lady who has tested them and proved their value. That for curing ham, she has had in constant use for many years, and although involving some more trouble than may be necessary in other receipts, the excellence of the result is thought more than a compensation; and from a personal trial of ham thus cured, we must add our highest commendation to hers. The receipt for curing beef she has tried but one winter, when it was found such a success that the trial is to be conducted this fall on a larger scale. EDS. CO. GENT.]

One pound and a half of salt, one-quarter of a pound of saltpetre, and one ounce of black pepper.

Mix these well together, and rub the ham *well;* cover it with what remains; let it lie six days without moving; then add one pound of molasses, after which turn the ham every day and sprinkle it with the pickle for five weeks. Then dry it well, and hang it up in a emperate heat to dry thoroughly.

Brine for Beef.

For 100 pounds of beef take
6 gallons of water,
9 pounds of salt, half fine and half coarse,
3 pounds of brown sugar,
1 quart of molasses,
3 ounces of saltpetre,
1 ounce of potash.

Put the above ingredients into a kettle and boil it, taking off the scum. As soon as the scum ceases to rise take it off, and when cold, pour it in the barrel on the beef. The beef should be rubbed with fine salt before packing in the barrel.

Autumn Hints.

Husking Corn.—Those who have large corn-fields may not have time to husk the whole before winter, without interfering too much with other labors. The introduction of the cheaper husking-machines may obviate this. If the ears are merely broken from the stalks and cribbed without husking, in large coarse cribs made of rails or otherwise, the corn will dry more perfectly and uniformly than if first husked. The husks appear to protect the ears from sudden changes of moisture and dryness—to keep off or absorb excessive moisture, and to admit a gradual and uniform evaporation from the ear. Such at least is the result of experience. This corn may be husked by some of the simpler machines during winter, which do not require the ordinary cold finger-work. Should the work be delayed, both the removal of the ears from the stalks, and the husking, may be done after winter sets in. This advantage we regard as the chief one conferred by husking machines—that is in obviating the use of the fingers in cold weather, and not in any greatly increased rapidity in doing the work. Farmers have always desired to find winter employment for their hired men; and if we can throw the crowding labors of autumn into the leisure of winter, an important object is attained. We are not prepared to say which of the husking machines are best, but we have been told by those who have made trial, that a sharp hatchet, to cut off husk and cob at one blow, is nearly as good as any.

Potatoes.—Remember that one of the best preventives of the rot, after housing, is perfect cleanliness. Many have observed that potatoes dug in muddy weather, with portions of the soil adhering to them, have been ruined during winter, while those put away clean have nearly or entirely escaped. It is, therefore, best to select dry pleasant weather for digging; and if this cannot be had, the potatoes should be washed, and allowed to drain and dry, before putting away. A good vegetable washer is figured and described on page 33, of last volume of the Country Gentleman, and it might perhaps be improved in expedition by turning a running stream into it, and providing a hole for the escape of the muddy water and earth. We have found Allen's potato-digging plow an important assistant in expediting the harvesting of potatoes in fine weather, in the same way that the horse-rake is in the hay field. Coolness and ventilation, as well as being kept in the dark, are important in preventing rot—hence they should rest on something like rack-work or slats.

Tools.—Every good farmer keeps his tools housed—but many during the busy period of summer, have left out some that should have been sheltered. The horse-rake has perhaps been placed on the fence in the corner of a meadow; the plow still lies at the side of the new wheatfield, where it was left when the harrow was brought in; the ox-cart stands behind the barn exposed to all weather; the roller has not seen shelter since last spring; two hoes and a spade lean against the side of the wagon-house, and other implements lie in various directions. The aggregate value of all may be three hundred dollars; five years exposure would totally ruin them for any value, and if so, then they are losing a fifth this year, or *sixty dollars*. Yet fifty cents worth of labor would place every one in good shelter. So much for the want of a little thinking; and doubtless not a few who are thus wasting so rapidly their property, would spend half a day in making a sharp bargain, in order to get an additional dollar from a neighbor—saving at the tap and wasting at the bung, truly!

A coat of paint applied to tools just after the seasoning of summer, will penetrate the cracks and be of great service in excluding water.

Trees and Hedges.—Young Osage hedges, planted out last spring, should have a deep furrow plowed along side near them, for complete surface drainage, and if this furrow were cleaned out with a hoe, all the better. We have elsewhere stated that such a hedge would do well if planted over or within three or four feet of a tile drain, which might otherwise be frozen and destroyed. Plowing two or three inches of earth upon the newly set plants, or those transplanted last spring, will serve as an efficient winter protection.

Young fruit trees set out in autumn should also have good surface drainage—they should also be temporarily banked about, to prevent the wind from loosening them; and the application of a winter mulching of short manure, for spading in, in spring, will enrich the ground, and protect it partially from freezing. But this manure should not be placed in a small circle about the foot of the stem, where it can be of little use, but should be spread several feet wide in every direction. It should be short and not strawy manure, or the mice may hide under it.

Those who mulched their young trees with straw in summer, should now remove it, or the mice may prove troublesome.

Feeding Off Pasture Land.

"It is certainly advantageous to pastures," says Thaer, "to remove the cattle from them now and then, in order that the grass may have time to recover itself. For this reason, on the best conducted farms, the pasture land is divided into separate parts. The animals which require the most succulent and nourishing food are first turned to each separate division, and after they are removed, the other kinds, which need a smaller quantity of nutriment, are fed there. By this means the whole of the grass is eaten, those kinds to which cattle are least partial with the rest. The herbage is then left to recover itself for a sufficient time, and afterwards the first herd is again allowed to feed upon it."

This system possesses decided advantages over the practice of suffering the cattle to wander over the whole extent of pasture ground. If the space is large, a great deal of herbage is spoiled or destroyed by the trampling of the cattle; the pasturage is never uniformly eaten off, but some portions are left to grow until it becomes dry and hard. This luxuriant but distasteful herbage is constantly increasing, and in time crowds out the finer kinds, already lessened by being cropped so closely and continually. Another advantage is, that stock are more quiet, and consequently feed better and keep in better thrift.

The succession of the various kinds of stock must be regulated by the circumstances of the owner. Their says, that in spring the best pasturage is often given to ewes, because it is needed to increase their supply of milk, and give them strength to nurse their lambs.

The grazing of lands with sheep in spring, if not allowed too long, has a tendency to thicken the growth of grass. But they cannot be followed by cattle immediately with advantage; at least three weeks should intervene, to allow the smell of their dung to dissipate, and the grasses to get a fresh start.

Very often cattle, horses, and sheep, are allowed at the same time in an enclosure. This practice, if the animals are properly proportioned, though preferable to confining each kind to a single lot through the season, is still inferior in result to the system of changing pastures, above described. It is true that horses eat herbage refused by cows, and that sheep can pick up grass too short for either, yet if they may follow each other with an interval of some days between, that *fresh, fair bite*, so much liked by all kinds of stock, will be better attained, and their thrift consequently promoted.

Much greater attention to the condition of pastures and the wants of our stock, will be necessary under this system, than we have been accustomed to give, yet we believe it will prove beneficial and economical n result.

Farming in New-Hampshire.

We recently made an excursion among a portion of the farming population of Merrimack county, N. H., taking notes of some things we saw in course of our jaunt relative to farm matters. Trusting that some of our "jottings by the way" may interest a portion of the readers of the Co. Gent., we will attempt to put them in a tangible shape.

New-Hampshire is more celebrated for its mountains and granitic rocks and soils, its snows and ice, and cold winters, than for its agriculture. It has not the broad prairies and fertile soils of the western states, nor the milder and more equable clime of the sunny south. But under these seeming disadvantages, our farmers generally manage to raise fair crops, and "bring the year about," and though they may annually handle a less number of bushels of grain, and perhaps a less number of dollars, than do the farmers in some other sections of the country, we think them, generally, quite as independant, happy, and intelligent, as are the tillers of the soil in any other of the states—old or new. * * * *

Thus far we have written of New Hampshire farming in general. We will now say something of individual farming among us. In our rambles we saw hundreds of farms, and the management thereof, with their farm buildings and fixtures, that would be creditable to any section of this or any other country. But we had time to particularly examine only three of them.

We first visited the place of Mr. Leonard Gerrish, in Franklin. He owns about 400 acres of land, 150 of which is wood and pasture land, lying back some distance from his residence. The homestead contains 250 acres, 75 of which is intervale or alluvial, lying on the easterly side of the Merrimack river. About 50 acres of which is annually or oftener overflowed; the water "setting back" upon it, deposits a sedimentary matter, that keeps up the fertility of the soil under pretty severe cropping. Upon the intervale, he has this season 30 acres in corn. This field of corn, half a mile in length, varies much in quality, owing to difference in soil, whether sandy or loamy, manuring, &c. Most of the crop is good. Four acres have now been planted in corn for six years in succession without manure, except plaster and ashes to the hills, and *deeper plowing*. The crop, he says, is as good this as on any previous season—it compares favorably with that which had been liberally manured. His object in thus planting without manuring, is to see how his alluvial soil will compare with the rich lands of the west under continual cropping. The poorest portion of his corn was on an acre or so, upon which he grew broom corn last year. Soon after the "brush" was cut, he plowed in the green and juicy stalks—a very heavy growth—and thinks their decomposition has produced a sourness in the soil that has proved injurious to this year's crop.

Mr. G. has near his house, some sixty acres of valuable wood and timber land; the balance of land on the home farm, is a light, sandy and loamy soil, very easily cultivated, and in wet seasons like the past, under proper culture, yields profitable crops of corn, rye, beans, &c. He has 20 acres of corn on this land, in quantity and quality, ranging all the way from very good to very poor. He estimates the cost of growing corn, taking the intervale and upland together, from the starting of the plows till the crop is hoed the second time, at about five dollars per acre—the manure not included. He thinks the fodder pays well for harvesting.

To some of our farmers, living upon hard, rocky, tough-swarded upland, who contend that it costs a dollar a bushel to grow corn, this estimate of Mr G.'s may seem very *modest* indeed. But he does his farm-work with swift travelling horses, his land is free from rocks, stumps and other obstructions, and we do not see why he may not cultivate his fields as cheaply as do the farmers out west, where they boast of "*cribbing* their corn" for from five to eight cents a bushel. A man, horse and boy, with a corn-planter, can plant ten acres per day. The after culture is almost wholly performed with the horse-hoe and cultivator. He planted twelve and a half bushels of seed corn last spring. Mr. G is somewhat largely engaged in the purchase and sale of cattle, as also that of hay, which he presses in bales and sends off per railroad. The hay cut upon his farm is mostly of first quality. He thinks his hay crop and corn fodder will be equivalent to 100 tons of hay.

His farm buildings are nearly all new, thoroughly and tastefully built, and well furnished; the grounds about the house well laid out, and ornamented with trees, flowers and shrubbery, and a fountain of water, &c., &c.

The next place at which we called was that of Mr. Stephen Gerrish, about half a mile from Leonard's. This is wholly an upland farm, containing 250 acres upon which there are not five acres of waste or unplowable land. His cultivated crops this year, consisted of six acres of well manured, stout corn: 12 acres of spring grain and three acres in potatoes, beans, &c. He has 200 acres of outland, mostly well wooded. Sixty acres of the homestead are in wood and timber. He has 75 acres of grass land, all producing good English hay, most of which can be cut with the mower. Some portions of his fields that were not sufficiently smooth for the machine he is turning over, levelling down, manuring and new seeding to grass. His buildings are large, conveniently arranged, and finished and furnished in a style becoming that of the intelli-

gent, and independent farmer of this country. He has an abundant supply of pure water, both well and aqueduct for the house, the barn, and the road side, and also, for a fountain jet, in his door yard, and a tastefully located fish pond—the surplus of which is used for irrigating a mowing field, that gently slopes towards the west, with a descent just sufficient to keep the water in motion. By the aid of his mowing machine, horse-rake, good hands, good living, and cold water, his 75 tons of hay is placed in his capacious barn without 'hindrance or let.' Fruits, flowers, and ornamental trees about the house, bespeak the taste and liberality of its inmates—while a row of rock maple trees, each side of the road, the whole length of his farm, well protected from injury by cattle, will, we trust, honorably transmit his name down to generations yet unborn.

Our last 'professional call' was at the well known "Webster Farm," in Franklin, about fifteen miles north of Concord. The farm is now owned by Mr. Fay. The estate consists of about one thousand acres; 160 of which is intervale, and 40 acres of cultivated upland, the balance being in timber, wood, and pasture. This year, there is about 100 acres in tillage, 30 acres of which is in corn of heavy growth, one field of which we passed through will average, we think, 80 bushels per acre; 26 acres in oats, 15 in rye, 5 of potatoes, 1½ in beans; 8 acres '*let*, on shares,' and 8 acres of oats turned under for green manuring.

The stock now on the farm is 22 of the horse kind; 60 head of cattle, mostly Devons, although there are a few of the Hungarian, Ayrshire, and Durhams, and others of various mixtures and grades. He has a large yoke of full blooded Hungarian 4 year old steers; we saw them plowing. Mr. F. appears well satisfied with them as working cattle; keeps 160 sheep; 16 swine of the Suffolk breed and their grades.

Last year he had 21 acres in corn, yielding 1,100 bushels; 700 of which he has sold, at an average of $1.09 per bushel. Hay crop this year, estimated at 125 tons; not more than five tons of which is not good English hay. Of his 30 acres of corn, this year, 22 acres were manured at the rate of from 25 to 30 loads of farm yard manure, per acre. The land is plowed in autumn, about twelve inches deep; in the spring he applies from 25 to 30 large cart loads of manure, which is well mixed with the soil by the horse-plow, harrow, &c.

In 'breaking up' sod land, he uses the double or Michigan plow of a large size. It cuts a furrow about 15 inches wide and 12 deep, and it frequently turns up the 'yaller dirt;' but he does grow capital corn, notwithstanding this. The day we were there was exceedingly warm, and his team being otherwise at leisure, he put before his big plow six oxen and two horses, all of which were driven by an Irish lad, and a live Yankee between the plow handles—the whole concern went round an eight-acre field like a locomotive, severing the twitch grass roots and reversing the soil to an average depth of 12 inches.

Aside from the manure, he estimates the cost of growing an acre of corn, from the starting of the plow till the stalks are fit to cut, at eight dollars per acre.

He gave us some account of his sales of stock, farm products, &c., for the past year: Corn sold, $750; oats 800 bushels, potatoes, 200 bushels—amounting to about $500; stock and wool sold, $960; 100 cords of wood, and 15,000 feet of lumber, pork, and many other items, in the gross amounting to a handsome sum that we cannot here particularize.

Nearly all his grass is cut with a machine and gathered with horse rakes. Horse hoes and cultivators passing each way of his corn-fields, leave but little work to be performed by the hand-hoe. In cultivating his hoed crops, a boy rode the horse thirteen days in succession (Sundays excepted.)

Mr. Fay has made very great improvements upon the farm since it came into his possession, some four years ago. He has the enterprize and the means for effecting still greater improvements, which we have no doubt he will soon accomplish if life and health are spared. He is one of those energetic, go-ahead men, in the vigor and prime of manhood, who says 'come boys,' and when about his farm he neither wears 'kid gloves nor broad cloth.'

He resides in the mansion house, formerly the occasional residence of the late Mr. Webster. The furniture, books, maps, &c., &c., were sold with the house, and they are now all there. The chair he occupied, the table upon which he wrote, the writing materials, to the very pens he shaped from the grey goose quill, all remain as when the "great expounder of the Constitution" left them. The place has become one of great resort for strangers and others. A register is kept of visitors, whose names fill many pages. We cannot but think the quiet and labors of this farmer's family must at times be somewhat disturbed, by the numerous calls they receive from strangers and others, curious to look upon the many things there, once the property of the great American statesman, whose remains are now quietly reposing far from his ancestral home, the home of his childhood and youth. LEVI BARTLETT. *Warner, N. H.*

A Mode of Saving Labor in Shingling.

I will take this opportunity of sending you for insertion in the Country Gentleman, a description of the manner which may be common, but which is new to me:

Take strips of board of any desired length, and six inches wide, and straight-edged on both edges; then stout wire two and a half feet long, with two to four nail holes at one end, and on the other end, a piece of band or other thin iron, (say three inches long, set on on like a hoe blade. Lay your first course of shingles by line, as usual; on your first course of shingles lay your strip of board; then dropping the hoe blade at the end of the wire, behind the first end of the board, draw that up to the butt of the shingles already laid, and nail the wire fast to the roof boards above. At the other end of the board fix another wire in like manner, which will also support in place the end of the next board, which at its other end is to be supported the same, and so on as far as you desire to go, to the end of roof if you have boards and wires sufficiently prepared. Against these boards, (guage boards I will call them,) lay the butts of the next course of shingles, shoving them close togther, and nail them fast, as commonly done. And when that course is laid, pass your boards upon it, and secure them even with the butts of this second course of shingles, with the wire-hoe as before; proceeding thus, course above course, to the ridge of the building. When you are near the ridge, there

will be no roof-boards ahead to nail the wire to; then turn the nail end of the wire down, and the hoe end of it up against the guage board, and butts of the last laid course of shingles, and nail the wire to the shingles below; this puts you to the necessity of driving a few small nails in the shingles towards the top or ridge of the roof.

A lath will answer for a wire, and a piece say three inches long, and thick enough to rest below the guage boards, and against the butts of the shingles, to catch behind them, and thus advance the guage boards exactly to their places. The guage boards determine the face you lay to the weather, of your shingles. I have put it at six inches, but if you wish any other space, you must make your guage boards of the width to accomplish it. With these preparations, any boy of common sense, who knows how to drive a nail, can be instructed to shingle in a very short time; and I think in one-quarter or one-half less time than in what I have considered the common manner, the shingling may be done. W. T. L.

Composts—Muck and Dissolved Bones.

The value of bones, broken, ground, or dissolved, for fertilizing purposes, is well understood, theoretically, at least, by most of our readers. Still no great attention is paid to their collection and use, and it is therefore one of those subjects upon which, believing we are working for the best interest of the farmer, we give "line upon line and precept upon precept," seeking to incite to their more general employment as a manure.

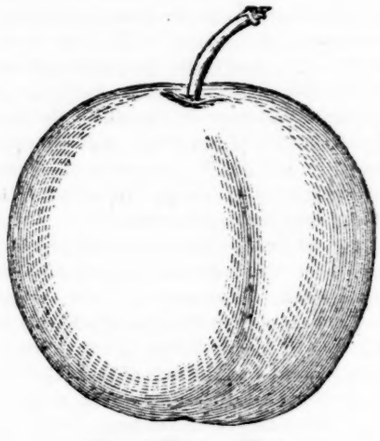
Bones consist of an earthy tissue of fine cells, in which an organic substance called gelatine is inclosed. This gelatine, according to STOCKHARDT, is abundant in nitrogen, and readily putrifies if moistened with water and left standing in the air; thus becoming fit for the nourishment of plants and causing an extremely rapid and vigorous vegetation. "The *forcing power*," he adds, "which *finely powdered* bonedust exercises upon vegetable growth is owing to the gelatine it contains." The earthy tissue of bones is principally phosphate of lime, "which in like manner exerts an exceedingly beneficial influence on the growth of plants, and in especial is very favorable to the development and formation of seed. Hence the *abundant produce of healthy grain*, after dressing with bone dust."

We see, then, that bones are rich in the elements of great value as a manure. In many places they can be procured at small cost—merely the trouble of picking them, or of laying by out of the reach of prowling dogs; and in a short time several bushels could readily be obtained by most farmers. The mode of preparing them for use is thus described (Patent Office Report for 1856,) in Mr. BROWN'S Essay on Swamp muck, before alluded to:

"Bones may readily be brought into the forms of paste by applying five pounds of sulphuric acid to every hundred pounds of bone. If the bones have been ground, half this quantity will be sufficient. Take a half hogshead tub, place the bones therein, dilute the acid with three times its bulk of water, turn on half the quantity and let it remain for twenty-four hours Stir the mass, and if the bones are not all dissolved, pour on more of the acid and water, and so continue until the whole is reduced to a pulp or paste When this has been effected, dry, finely-pulverized muck should be intimately mixed with this paste, until the whole will be in such a state as to scatter readily from a shovel."

A most economical method of applying this bone paste as a fertilizer, is first to compost it with muck, as described by the same authority. Layers of muck, six inches thick, we sprinkled with bones prepared as above, until the pile was completed. This compost is considered by Mr. BROWN, as "next to muck and barn-manure in value, and plenty of instances," he adds, "might be cited to sustain this opinion. In gardening, and especially on the light lands commonly used for that purpose, this compost is one of the most convenient to use, quick in its effects upon the plants to which it is applied, and yet permanent in its results."

This method of dissolving bones or of treating bonedust, with oil of vitriol, or sulphuric acid, is that by which the far-famed "super-phospate" manures are manufactured. It is a readily soluble phosphate of lime, and therefore of prompt and efficient action and value. Composted with muck, it may readily be applied to the soil, and will give increased results in this combination, besides being safe and convenient of application to the soil.



Royal Tours Plum.

Large, (an inch and a half in diameter,) nearly globular, a distinct but shallow suture extending half around, the whole surface plump and obtuse; skin reddish purple in the shade, but very dark purple in the sun, with a conspicuous blue bloom; stalk half an inch long, set in a small and shallow cavity; flesh, light brown when fully ripe, juicy, quite high flavored, at least "very good," according to the pomological scale—nearly free from the oval, flat stone. An excellent plum. Specimens, from which the accompanying drawing was made, were received from Ellwanger & Barry of Rochester, and were fully ripe during the latter part of 8 mo. (Aug.)

PLAN OF BARN.—Our correspondent, H. H, has sent us a good plan of a horse and cattle barn, but in the description of the mangers and feeding racks, a part of the reference letters were omitted, and the cross section does not show the different positions sufficiently to enable us to make drawings from the sketches sent.

The Wheat Midge.

If, with reference to human affairs, the poet has found reason to exclaim,

"What dire effects from trifling causes spring?"

the naturalist and the farmer have equal reason to be astonished at the apparently insignificant means an all-wise Providence employs for producing the most important results. Who would believe that a little fly about the size of a mosquito, could almost rule the destiny of a nation, and annually cut short the wheat crops of this country to the amount of millions upon millions? It would be impossible to estimate with any degree of accuracy the loss sustained by the farmers of the United States, within the past ten years, by the ravages of the wheat midge. Some twenty years ago the Maine Farmer stated "that a million of dollars, nay, more money, would not pay the damage it had done to the State of Maine alone." Subsequent calculations are given, whereby it appears that in the western part of Vermont the amount of destruction caused by the wheat midge, "may be set down at *three and a half millions of dollars.*"

If such losses had occurred in the wheat crops, by the ravages of the midge, in Maine and Vermont some twenty years ago, what must be the sum total of loss sustained by the farmers of this country since that time, in consequence of the vastly greater range of territory infested by the midge, and much of that territory heretofore the finest wheat producing sections of the country, if not of the world?

The earliest published account of this insect is contained in a letter by Mr. C. GULLET, published in the Philosophical Transactions, England, for 1772. Mr. G 's letter gives a short but very correct history of the winged insect, the orange colored midge, and its destruction of the grain. He says, "the fly is so prolific that I last week distinctly counted forty-one living yellow maggots in the husk of one single grain of wheat."

From 1772 down to the present time, the midge has been known as injuring the wheat crop in some one or other sections of England and Scotland. Prof. HENSLOW, in his Report on the diseases of wheat, 1841, says that about twenty years ago the insect was much more destructive. Since Mr. GORRIE stated that the loss sustained by the farming interest in the Carse of Gowrie by this insect alone, amounted to no less than £36,000 in 1829. It seems there is great difference in the amount of damage done by the midge in the same districts in different years. Mr. Gorrie says: "The number of flies produced appears to depend partly on the quantity of maggots deposited in the soil the previous autumn, and partly on the occurrence of a mild temperature about the middle of June when the wheat ear partially appears. Unless the weather be serene and dry, with the thermometer above 54° Fah. at night, (the period when the eggs are deposited in in the chaff scales,) few or none of them are deposited, which may account for the manner in which its depredations have diminished since 1830." He also adverts to the check given to the propagation of the insect, even in favorable weather, by the operations of a small beetle which destroys the maggot. He also recommends burying the surface of the ground containing the maggot at the bottom of the furrow by the means of the skim-plow.

In a paper in the English Ag. Society's Journal, 1845, by Mr. CURTIS, he says, "the wheat midge has been observed in Scotland and Ireland, as well as in a great many counties in England;" but "three different parasites check the multiplication of the British wheat midge."

It is now eighty years since Mr. Gullet gave a correct description of the wheat midge, having "counted forty-one living maggots in the husk of one single grain of wheat," and from that time to this, they have been spread over the wheat-growing sections of the British Isles. But we think the injury sustained by the wheat crops there, by the depredations of the midge, have been trifling compared to the loss inflicted upon the American farmers by the ravages of the insect, and it is now only about thirty years since it first attracted notice in this country.

To our view, there seems to be several reasons why the increase and ravages of the midge in England, have been restrained to a much greater extent than in this country. First, the lower temperature of the weather in England at the time the wheat is in blossom. Mr. Gorrie says the temperature must be as high as 54 degrees at night, in order that the fly may deposit its eggs. This temperature, perhaps, may scarcely occur in some seasons, while the wheat is in the situation to be injured. Secondly, they have three kinds of parasites there that prey upon the maggots—the orange colored midge—this may tend very much towards lessening their numbers. We are not aware that there is any parasite in this country that destroys the midge, though it is said the yellow-bird feeds upon them—if so, they cannot very much lessen their numbers. 3dly, the more general turning under the stubble after harvest than in this country. In New England, probably nine-tenths of the land sown with wheat, is at the same time sown with grass seeds. The midge, when matured in the heads of the grain, obeying the instincts of nature, leaves its chaffy tenement, falls to the ground, entering it from half an inch to two inches. In the *unplowed* stubble field they remain secure and undisturbed till the next season, when having changed from the grub to that of the winged insect, they are prepared for the propagation and perpetuity of their species—but this is at the expense of the wheat crop.

Could the wheat stubble after harvest all be turned under by the plow, as proposed by Judge CHEEVER, to the depth of eight or ten inches, and then firmly pressed down with a heavy roller, and the inverted stubble left undisturbed, doubtless but few if any of the insects would ever again see the light of day. But the great trouble in an enterprise of this kind, would be to get concert of action among the farmers over any considerable tract of country. It would be of little avail for the farmers of one county to plow in their stubble, for the midge has spread over the country in every direction, "at the rate of *twenty or thirty miles a year.*"

Says Dr. Harris, "the wheat fly is said to have been first seen in America about the year 1828, in the northern part of Vermont and on the borders of Lower Canada. From these places its ravages have gradually extended, in various directions, from year to year. In course of a few years it had visited a considerable portion of Upper Canada, of New-York, New Hampshire, and Massachusetts, and in 1834 it appeared in Maine,

which it has traversed in an easterly course, at the rate of twenty or thirty miles a year."

A writer in the *Rural New-Yorker* of Sept. 4, over the signature of P., says, "the midge, one of the frailest of insects, is in its ravages the most destructive enemy the farmer has to contend with, and its power will soon be felt over the whole continent. In this State alone, its ravages have cost the farmers not less than ten millions of dollars for this year. When they reach the black lands of the prairies in the Western States, as they will in some three or four years, for they are now in Michigan, it will become a grave question as to where we shall obtain our wheat bread"

In the face of such gloomy prospects, it becomes the wheat-growers of the whole country, where the midge prevails, to unite as one man, in taking every precaution "to head" and nip the evil in the bud. Legislative enactments and penal codes would avail little in this case. Self-interest and the public good, should prompt to efficient action.

Thorough manuring and preparation of the soil with early sowing, has been found tolerably successful in arresting the ravages of the insect. The earliest varieties of wheat should be sought out for cultivation, even if not of quite as good a quality as the "best Genesee." Both autumn and spring sown wheat should be sown without grass seeds, and the stubble turned in after harvest. Though, in this case, it would be advisable in the spring to sow clover seed and plaster, for the express purpose of plowing in with the stubble—if this was done early in September, the probability is, that the decomposing vegetable matter buried in the soil would produce heat sufficient to hatch out the grubs; if so, and the fly came to the surface of the ground, it would be harmless, as there would be no place of deposit for its eggs. Though we think it very doubtful whether many of them would ever, when plowed in eight inches deep, reach the surface, either in fall or spring.

When the stubble is plowed in as suggested, it could be sown with winter wheat or rye, or grass seeds alone. A good crop of grass would usually follow the next season; or spring grain, oats, barley or rye and grass seeds might be sown on the inverted stubble land—but only the cultivator and harrow should be used in preparing the land for the crops; or by manuring, cultivating, &c, corn would succeed well. But whatever culture should follow the inverted stubble, the great object should be to keep it undisturbed.

The idea of starving out the midge by a general cessation of wheat growing, in any section of country now ravaged by it, is out of the question. Thousands upon thousands of farmers would continue to sow, if they were certain of not reaping over five bushels per acre.

Whether the midge was originally a *native* of this country, or an *imported* evil, we have no means of determining; but incline to the belief that within the past forty years, it must have been brought to some part of Canada or Vermont, in the straw used in packing crates of crockery ware, from whence they have spread in every direction. Why they have been so much more numerous and destructive here than in the British Isles, we have attempted to show.

If the midge has been imported as above suggested, might not the parasites that prey upon it, or some of them, spoken of by Mr. Gorrie and Mr. Curtis, also be imported to checkmate, in some degree at least, this terrible scourge of our wheatfields. L. B.

How to Save Potatoes from the Rot.

MESSRS. EDITORS—That your numerous readers may have the benefit of my experience in potato culture the present season, I will give you a short sketch, as follows:

From the 16th of April up to the 1st day of June, I planted at intervals some 23 varieties of potatoes. In respect to these several varieties my general course of culture was the same, and every aspect was of the *most flattering* character in all cases until at *least* one-half had passed the period of ripening in apparent safety. What then? Why, *dark, dead spots* began to appear upon some of the leaves, otherwise of a deep green color.

What could be done? These early varieties *must ripen*; their tops must *die*; and to die a *natural* death amid a pestilential atmosphere, was *impossible* without a miracle.

It soon turned in my mind that by pulling the tops of *ripe* potatoes previous to the time when the juices of the stalks should become vitiated and descend to the tubers still joined to their parent roots, the tubers might be kept sound in the earth until desired for the table or for shipping, and also secure the toughening of their tender skins before removing them from the soil, as well as gain a *cool* and more pure atmosphere before exposing them above ground.

Every circumstance that has transpired since I put the above suggestion in practice, has only served to confirm me in the belief that it is the *only sure way* to *save early* potatoes from becoming infected, if they ripen between the 15th of July and the 5th of Sept.

No variety to which I have applied the above rule of prevention to the *rot* in due season, has suffered at all, but it is just as light and fine flavored when cooked as it was before the blight appeared.

If any one has tried the same plan to save his ripe potatoes, *with* or *without* success, he should let the public know it.

I did not harvest the tops of any of my potatoes beyond what was needed for the table, before the 1*st of Sept.*; and yet I was in time on every variety that was still in a thriving condition; whereas, I ought to have begun the harvest by the 10th or 15th of Aug, and I need not have lost a tuber. In the application of the rule of prevention, in regard to *time*, a mistake of one day would prove fatal in some cases. This *apparent* exception to the rule would thus only serve to confirm it.

If we can determine from the *appearance* of the surface of the stalk or tuber the approach of disease, we can, by applying the rule of prevention the same day, arrest or prevent it.

The stalk must continue fresh and green, and the tuber *bright* and *smooth*, or otherwise if an occasional stalk or tuber appears of a *pale* or *dull color*, the "*plague has begun;*" there is no time to lose. Observation and practice will give the agriculturist power to determine and anticipate the approach of danger with a precision sufficient for every useful purpose; and thus thousands of bushels of summer and

fall potatoes will be saved in good condition, that are now lost to the world annually for the want of this timely remedy. J. C. CLEVELAND. *Torringford, Ct.*

The World's Prize South Down Ram.

It will be seen from the following letter, that that enterprising breeder of South Down Sheep, Mr. J. C. TAYLOR, of New-Jersey, has received a most valuable acquisition to his flock, in the celebrated ram to which was awarded the first prize at the great Industrial Exhibition in France, in 1857.

EDS. CO. GENT.—It having been announced in your Journal that I was the purchaser of the "Prize Ram" at the World's Exhibition in Paris, owned and shown by Mr. JONAS WEBB of Babraham, near Cambridge, England, I am happy to say that the ram has been purchased by Mr. J. C. TAYLOR of Holmdel, Monmouth Co., New-Jersey, and has arrived in this country in fine condition. The heavy outlay and great risk attending it, might well deter a man of less nerve than Mr. T. in embarking in such an enterprise. The value of the sheep may be better understood by a quotation from a letter received by me from Mr. WEBB. Speaking of some of his tups having failed in their work, he says:

"I would at one part of last season, have gladly given 200 guineas for his services."

I can but congratulate Mr. TAYLOR and the public on having the services of so valuable an animal in this country, and I can assure the friends of the South Down, that with Mr. Taylor's valuable flock of ewes, and his good judgment in breeding, we shall most assuredly see great advances on anything yet shown in America. Mr. Taylor has my most cordial good wisher for his highest success. R. LINSLEY. *West Meriden, Ct., Sept. 10.*

Seed for "Next Year's Corn-Fields."

"As soon as I went through this year's corn-field again, I was reminded by vacant and small hills, (reenforced now with beans,) that we said nothing about *seed* for next year in our recent conversation. I have since been selecting seed-corn, and you must look at my dozens of eight and twelve rowed Dutton, worthy, perhaps, of exhibition at our county fair." So said the friend, the *programme* of whose "next year's corn-field," has already been given our readers. The seed was really a fine sample, and we advised him to send a few dozen ears to the State Ag. Rooms for distribution by Secretary JOHNSON. He promised to do so.

"Did you ever observe," said he, "the individuality of the productions of Nature. In that whole field of corn, you find no two ears exactly alike. No two stalks are the same in habit and growth, but still there seems to be distinct classes, which resemble each other in conformation and product. In a single hill there may be a thrifty stalk with a fully developed ear, and perhaps another stalk equally thrifty, with an imperfect product, or a dwarfish, irregular stalk, handsomely eared, or the opposite. Now, for next year's corn-field, I want fully developed ears from thrifty growing stalks, so that there may be a better chance for a large number of like character in the product."

"There is a difference, too, in the time of ripening, especially the present year. I can select corn maturing full ten days earlier than the balance of the crop. By so doing I shall improve my next crop very materially."

"Corn picked now, and dried thoroughly before cold weather, will be *sure to grow*. A day's work at this time, last year, would have put ten dollars in my pocket, now—lost from seed which failed to grow this spring."

These hints, if followed and acted upon, will tend to improve the corn-crop of the country.

Draining Improves the Quality of Crops.

That the productive power of the soil was largely increased by draining in cases of retentive lands, has often been noticed; few, however, have remarked upon the improvement in the quality of the crop effected by the same process. Mr. FRENCH, in his Essay on Drainage, gives a brief paragraph on the subject, so pertinent and conclusive that we copy it here. "In a dry season," he says, "we frequently hear the farmer boast of the quality of his products. His hay crop is light, but will 'spend' much better than the crop of a wet season—his potatoes are not large, but they are sound and mealy"—and so of other crops. "Every farmer knows that his wheat and corn are heavier and more nutritive when grown upon land sufficiently drained."

The deepened soil in which manures have their full effect—the season not shortened at both ends by the presence of stagnant water in the soil—the mellow, porous seed or root-bed, not affected by drought or freezing out, all resulting from drainage, readily account for the improved quantity and quality of the crop, whether it be grain or fruit, roots or grass, or whatever it may be desirable to cultivate in the best manner.

Lime as Manure.

MESSRS. EDITORS—What kind or quality of soil will be most benefited by the application of lime? (1.)

For the growth of what crops is it best adapted? (2)

What number of bushels per acre is the right quantity? (3.)

In what way should it be applied; whether plowed in, or as a top-dressing; and at what season of the year? (4.)

Which kind is best, burned shell or stone-lime? (5.)
JESSE CHARLTON. *South Windsor, Conn.*

(1.) Lime has proved highly beneficial on some soils, and but little so on others—but the peculiar external characteristic of each has not been satisfactorily determined. Soils which already contain large quantities of carbonate of lime (of which there are but few,) will not of course need it—but on the other hand, there are some which exhibit no signs of it, which are *not* benefited.

(2.) When beneficial, all the common farm crops, in a course of rotation, are improved by it. As it is applied usually but once in a course of years, its effect cannot be confined to one particular crop.

(3.) Here again there is much indefiniteness in practice and theory. No less than 500 bushels have in some instances been employed—more usually 100 to 150; but some eminent farmers have latterly adopted the opinion that 20 or 30 at a time, is as large a quan-

tity as can be profitable, an oftener application being made Magnesia or "hot" lime, from its caustic nature, should not be applied in larger quantities than 50 bushels per acre. In England, where an application sometimes lasts nineteen years, it is more copiously applied than where the dressings are more frequent. Strong soils will bear more than thin ones; and in all cases manure should be given to the land, unless naturally very fertile.

(4) A manure like this, which cannot evaporate, may be applied at any convenient time, favorable for its diffusion with the soil. If for wheat, it may be spread and harrowed in when the wheat is sown; and a similar treatment may be adopted with spring crops. One requisite only, is important, namely, that it be finely powdered when spread, for if in lumps, it can be of little use until it becomes intermixed by years of cultivation. If slacked to fine powder, it may be spread from a moving wagon with a small scoop-shovel, a mild breeze blowing from the operator; or it may be applied by means of a broadcast sowing-machine. It is a common opinion that caustic or water-slacked lime is better than mild or air-slacked; but this opinion seems to be erroneous, for caustic lime is rendered mild in a very few days by exposure, while the benefit of the lime as manure lasts for years. Indeed, many or most of the opinions in relation to its operation, appear to be mere notions, and there is little that is fully established, except it often proved very beneficial, more frequently but slightly so, and sometimes not at all.

(5) No difference, so far as the lime itself is concerned—foreign substances may variously affect the results.

The Potato Rot—Chinese Yam or Dioscorea.

Messrs. Editors—On Thursday and Friday, 9th and 10th inst., I took an excursion over a portion of Merrimack Co., N. H. In every direction the potato tops were blackened and dead, as if they had been visited with a heavy frost. I made particular inquiries of great numbers of farmers in reference to the potato rot, and at that time it had scarcely made its appearance in any place. Thursday and Friday were excessively warm; Saturday it rained all day. Within three days from this it was found the potatoes on every hand, and of nearly every variety, were rotting badly, the Chenangoes suffering the most. I planted a patch very early, which we have been using daily for the table for a number of weeks. Up to last Saturday we had not found a diseased potato. Yesterday (15th Sept.) dug several bushels—full one-third part are diseased. It is now (Thursday) raining hard, and the probability is that it will increase the evil.

Was it the hot weather of the past week, or the rain, or both, that has so suddenly brought destruction upon our potatoes? or is the insect, described by Mr. Henderson of Buffalo, the cause of it? or is it caused by 'electricity,' as contended by Edward Mason of Detroit, in Co. Gent. of 29th July? or is the cause of the potato rot, like that of the Asiatic Cholera, still enshrouded in a mystery "past finding out."

The Chinese Yam.—From the account of the Chinese Yam, as published in the Patent Office Report, 1854, and the confident assertions of its great value, scattered broadcast in pamphlet form all over the country by Mr. Prince of Flushing, L. I., I entertained great hopes that this "esculent, stamped by the Creator with pre-eminence over every other by its azote and albumen," might in a great degree take the place of the now precarious potato, and I early took means to procure some of the seed or sets. I have now for the three past seasons experimented in its culture, and the result of my experience in the matter, is that the Chinese Yam, as a food-producing plant, is worthless in this section of the country.

I shall not call the thing a humbug, nor the venders of it swindlers; that might all be wrong—at any rate it would be impolite; but there is some mistake about the thing—a screw loose somewhere. Only think of plowing or spading up a good soil to the depth of two feet, and then planting, hoeing, &c, as for the potato crop at harvest, with a spade digging for every tuber a post hole eighteen inches deep, and for all this labor getting once in eighteen inches a tuber, in the largest part, perhaps, from one to two inches through, and only some three inches of it large enough to cook, the balance of it tapering off like the tail of a large rat I can do better in growing Chenango potatoes, even if three fourths of them rot, than I can in raising the Dioscorea.

In a "Supplementary Catalogue" for 1858-9—just received from Mr. Prince, he says, "this most valuable, nutritious and productive of all esculents, is now under successful culture by more than 1,000 persons" If so, I sincerely hope they may be more successful in its culture than has been your humble servant. L. Bartlett. *September* 16, 1858.

Dr. Farley's Vineyard at Union Springs.

One of the finest young vineyards in the country is that of Dr. Farley, at Union Springs, N. Y., about a mile and a half above the village. Its locality is beautiful and picturesque, on a peninsula projecting into Cayuga Lake, and surrounded on three sides by water. The shores of this peninsula are lined with belts of of trees, which afford a valuable protection from the winds, and add to the beauty of the place.

There are about six acres covered with the bearing vines, and two more acres occupied with a younger growth. The vines are trained on wire trellis, supported by cedar posts—the lines of trellis being eight feet apart, and the vines are planted at twelve feet distance in the rows. A less distance is found not to answer well, as the Isabella grape, which constitutes most of the plantation, will not bear cutting back without injury, to confine it within narrower bounds. The Catawba will bear different treatment, and closer pruning. The vines were trained with much neatness to the supports, and a finer and more luxuriant picture could be scarcely conceived, than that presented by the many long and regular lines of massive foliage, half concealing the rich purple bloom-dusted clusters hanging beneath. We measured some of the single berries *nine-tenths* of an inch in diameter—eight-tenths was a frequent size. The vines are four years from planting, and yielded last year a ton and a half of grapes, and this year the crop is estimated at seven or eight tons. Last year's crop sold for 15 cents per pound, and about the same is offered the present year.

This fine growth and great success are not the result of *luck*. The soil, naturally strong and produc-

tive, was trenched two feet deep by the use of subsoil and trench plows, and about two hundred loads per acre of muck were applied during its preparation—this muck was formed by the deposit of vegetable with probably a portion of animal matter, in a shallow cove of the lake, adjoining the vineyard. Besides this enriching, thorough and complete cultivation is constantly given to the soil.

Alum for the Hog Cholera.

Eds. Co. Gent.—Last May my hogs were attacked with Hog Cholera, and upon mentioning it to a friend, he spoke of a suggestion published in a Cincinnati paper, advising the use of alum. I procured some—made a strong solution—all the water would bear, and drenched all I found with the disease upon them, and gave to the lot (about 100 head) a pound of pulverized alum in some mill feed each day for two weeks, by which time all remaining seemed healthy. Out of twenty-two drenched with one pint of the solution to each—administered with the assistance of a rope behind the tusks, and a horn with small end sawed off—I lost five head, and with the exception of two, the remaining seventeen appear to have entirely recovered to a healthy, thrifty condition. Some of those which have recovered, were in the last stage—vomiting, with the red blotches on the skin, and bleeding at the nose, which I have always considered the last stage of the disease. The above is but little cost, and if it is as successful as with me, is well worth the trial. J. T. Warder. *Springfield, Ohio.*

Farmers, Plant Apple Orchards!

If any farmer who has had for 20 years a good orchard of grafted apple trees, properly selected for market, and in tolerably favorable portions of the country, has kept an account of the annual *average* product of his trees for that time, he will find they have *netted* him fifty dollars per acre a year. This remark applies to such orchards as have had no care. Those which have received good cultivation have done better.

Why then cultivate whole farms, at hard labor, for a net proceed of five dollars per acre? Why not plant orchards? "They won't bear in an age." That is because, then, they receive no care. Give them the same chance that a crop of potatoes receives, (and which would not cost a tenth of the labor expended yearly on the potatoes,) and they will send out shoots two or three feet long—but if neglected and weed-grown, and grass-bound, they will grow only two or three inches—in one instance twelve times as fast as in the other. No wonder, then, while the thrifty orchardist with his thrifty orchard, has fine young trees with remunerating crops in five years, the slip-shod cultivator does not attain the same in fifty years, at the above estimated rates of growth. These rates are stated from the result of actual experiment, and not from hap-hazard estimates.

Plant orchards, then, of the best varieties. Occasionally, it is true, there may be destitute years, and sometimes the crop at large may overstock the common market. But the above yearly average may be attained at least, in the course of seasons; and the cultivator who is known by his skill to have none but the best fruits, and made better than that of his neighbors by superior cultivation, will be eagerly sought by fruit buyers, even in the most abundant seasons, and if he ships his own apples, he may often obtain triple prices for his handsome and excellent specimens.

Indian Corn.

How shall we ascertain the quantity grown per acre; This can be done by seasoning and shelling the corn. But cannot a sufficiently near approximation be made by weighing the ears, when dry? This has been done in some counties to our knowledge, and with great confidence that they were right. At one time 75 lbs. weight of ears was established as a standard bushel; since then, we have learned that the standard has been altered to 85 lbs. It is clear that both these quantities cannot be correct. Perhaps the truth may lie between; or perhaps variation may arise from different varieties of grain, or different degrees of seasoning. The question is one of interest; our purpose is to acquire information.

One of the oldest and most observing cultivators of this plant within our knowledge, informs us that he has proved by actual experiment, that *seventy-five pounds* weight of ears of the large kernelled white variety of corn usually grown in Plymouth Co., Mass., will, when shelled, make one bushel by measure. Can you, or your readers, Messrs. Editors, give any reliable information in this matter?

The present aspect of our fields, and state of the thermometer, afford assurance of an abundant harvest. P. *Essex Co., Mass.*

Apple Tree Worms.

Last winter my brother, O. S. Wood of Montreal, communicated to me the Canadian method of eradicating the *caterpillar* which infests apple trees in spring. Last spring I tried it in my own orchard with the best success. I communicate it for the benefit of your readers, though for aught I know, it may be known to them.

Upon the end of a pole long enough to reach the highest nests, fasten a good swab of cloth; dip the swab into very strong soap-suds, thrust it through the nests, and wash the limbs as thoroughly as possible where nests are commenced.

When applied within a week after the first appearance of the worms, a single application is often sufficient to arrest their progress for the season, but sometimes, subsequent applications may be found necessary.

Three applications of this method, if so many are necessary, will require no more time, standing upon the ground, than a single application of any other method with which I am acquainted. I have tried it but one year, but with the utmost success. Try it. Otis E. Wood. *Etna, Tompkins Co, N. Y.*

Flatulent Colic in the Horse.

Messrs. Editors—The following formula I have found very efficient in flatulent colic in the horse; easing pain in a short time, and operating as a cathartic in a few hours, giving permanent relief:—Linseed oil, one pint; castor oil, half a pint; tincture of opium, one ounce; sulphuric ether, two ounces; mix, and give at one dose. Geo. Hammond. *Gilsum, N. H.*

Various Hints.

Weeds.—It is very important to get rid of the seeds of all weeds which may have fallen the present season. All land intended for hoed crops next year, should therefore be harrowed after every rain, to start the weeds. Most of them may in this way be destroyed, if done before plowing.

Wheat.—Scattering old well rotted manure over wheat after it has come up, especially on the most exposed knolls and on clay soils, is a great protection against winter killing, and will give the plants an early start in spring.

Potatoes.—If these are buried in heaps out-doors, and plenty of straw can be used, the safest mode of keeping, most economical, and most secure from rotting, is to put 50 or 60 bushels in each heap, cover with straw a *foot thick when it is packed*, and with only three or four inches of earth. The straw absorbs moisture, &c., from the potatoes, and this mode is greatly superior to the common practice of using less straw and more earth—so says thorough trial.

Fattening Animals.—Whatever may be the food given, two indispensables must be observed, namely, cleanliness both of animal and food, and regularity, We have known half the value of food wasted, by filth and discomfort,—worse than throwing away cash; and we have known animals to waste more flesh by fretting long for an expected meal, than the food restored.

Paint Tools —Carts, plows, wagons, and other articles, should have a good coat of paint early in every autumn. They are now dry, and all cracks will absorb the paint and prevent the ingress of water at a later season. Wash them perfectly clean, of course. A light colored paint is best, as it absorbs least of the sun's rays. Dark paints cause the wood to become hot in the sun, and warp and crack. Now is the time.

Cleaning out an Obstructed Drain.—This has been successfully effected by using a large eel, which works itself slowly through, followed by the water.

Cheap Farm Cisterns.

Messrs Luther Tucker & Son—I notice your remarks relative to, and directions how to construct water cisterns, as repositories of rain-water for farm uses.

Cisterns constructed upon this plan, will obviously be permanent and require no repairs. But a cheaper plan has been adopted in this village, which is found to answer admirably well. A pit of the required dimensions is dug, leaving the sides nearly vertical, when a thick coat of hydraulic cement or water-lime is spread upon the bottom and sides, up to within about three feet of the surface of the ground. The earth above this point is thrown back, so as to allow of laying timbers across the pit or cistern thus formed, upon which is laid a plank floor. This floor is then covered with earth, and the surface of the water, when the cistern is filled, being below the action of frost, the structure is not liable to derangement or injury, until the timbers, from decay, require to be replaced.

Several of these cisterns have been constructed in different parts of this village, for the use of the fire department, containing from 150 to 250 hogsheads each. They prove to be perfectly water-tight, and although some of them were constructed eight and ten years ago, the timbers over them are yet sound. E. F. *St. Johnsbury, Vt.*

Curing Corn Fodder.

Mr. Dolsen's advice in regard to stacking corn-fodder (Co. Gent., March 11,) reminds me to send you an item of my experience. Year before last we thought our cornstalks were well cured in the field, and drew them to the barn-yard and stacked them. They were much injured by mould and damp, especially in the centre of the stack, which, I should have remarked, was a large one. Last year we drew in a few loads of stalks and placed them on a scaffold, with plenty of dry straw between the layers. Both stalks and straw were nearly spoiled by rotting. A few loads more were stacked around three poles set up a little distance apart at the foot, and meeting at the top; these cured and kept well. So also did some remaining in the stack in the field where grown, through the winter. In small stacks, with an opening through the centre, I think stalks will generally keep well, if left in the field until cold weather comes on. J. *Niagara Co, N. Y.*

Rural and Domestic Economy.

Sore Necks of Oxen.—Every farmer is aware that the necks of working oxen are apt to become sore in wet weather. To prevent it, occasionally rub a little tallow on the yoke and bows.

Hard Cement.—Pulverized brick (which has been well burnt) 13 parts; well ground letharge 1 part—made to a paste by linseed oil. Apply as a plaster, previously wetting the surface with a sponge, to prevent the cement being too much absorbed. It becomes hard in three or four days. It may be applied to wood, but also to stone or metal, and resists water.

To Keep Dust from Cream—*hoops useful for once.*—Take rattans, and make hoops a little larger than the pans,—stretch thin muslin across, thin enough to admit some air, but not flies and mites. Cover the milk with these *as soon as it is cool*, and they will prove of great value.

Moths in Carpets.—The following remedy is better than camphor or any other volatile repeller. Wring out a crash towel, and spread it smoothly on the carpet, wherever moths are suspected or detected. Then iron it dry with a hot iron, repeating if necessary. The hot steam will penetrate the carpet (not injuring the color at all,) and kill both worms and eggs

Fruit Trees near Barn-Yards.—We have known peach trees to grow four feet in a year when planted on the margin of a barn-yard, and others every way else alike, away from the barn-yard but eight inches. Fine crops of peaches and apples may be had by setting the trees around such yards.

Inverted Posts.—A correspondent of the Wisconsin Farmer says that in 1802, his father set two barposts, cut of swamp white-oak, the stick being split into halves, and one set inverted, the other not. The latter was decayed twenty years afterwards—the inverted one, when he last visited the place forty years after setting, was as sound as ever.

Chip Manure.—Fine waste chips may be always used profitably. If the garden or farm is of a clayey character, apply the chips at once, and they will render it dryer and lighter. If gravelly or sandy, the chips will make it worse, unless previously well worked up in the barn-yard with the manure, or well decayed in the compost-heap.

The Fall Web-Worm—No. XVII.

A caterpillar which feeds upon the leaves of different trees and forms large cobweb-like nests near the ends of limbs, has been excessively abundant the present autumn. Within the sphere of my own observation these nests have been at least three or four times as numerous this year, as at any time time before during the past twenty-five years. They are a current topic of conversation, and many persons suppose them to be the same kind of caterpillars which form nests somewhat similar upon apple and cherry trees in the mouth of June. Almost every one with whom I happen in company, inquires of me respecting this insect, and I doubt not an account of it will be acceptable to the readers of the Country Gentleman.

The caterpillar which forms the nests alluded to, is known in some sections of our country by the name of the Fall Web-worm. It comes from the eggs of a miller or moth of a kind analogous to what are termed Ermine moths in England, from their clean white color, resembling that of the ermine fur. These insects pertain to the order *Lepidoptera* and the group or family *Arctiidæ*, which family is distinguished chiefly by having the antennæ or horns pectinated, as it is termed, that is, resembling the teeth of a comb, and the mouth furnished with a very short coiled tongue. And this species, in allusion to the web which the larva forms, has been named *Hyphantria textor* by Dr. Harris, each of the words of this name having the same import, and meaning a weaver, the first being derived from the Greek and the other being Latin.

The moth from which our Fall Web-worms are bred comes abroad mostly in the month of June, though individual ones may be met with at other periods of the year. It measures an inch and a quarter or three-eighths across its spread wings, and is of a milk-white color throughout, without any dots or spots on its wings or body. It is quite dull and sluggish in its motions, and remains asleep during the day time. It is usually found clinging to the leaves of bushes, and a pin may be thrust through it before it appears to awake and flutter its wings.

This moth glues its eggs to the under surface of a leaf growing at or near the end of a twig. Its whole stock of eggs are placed together, in a flattened mass, side by side. The eggs are of a pale green color, almost white, and are more or less covered over with a soft white wooly substance. The egg state continues about three weeks, varying somewhat, no doubt, with the temperature of the weather. From eggs which I saw one of these moths depositing on the 22d of June, part of the young worms were found hatched on the 11th of July, and it was two or three days later before all of them had given out their inmates.

When they first come from the shell, these worms are so small and their jaws so weak, that they are only able to eat the tender pulpy part of the leaf on its under side, leaving the tougher transparent skin of the upper surface entire. But when one or two leaves have been thus fed upon, they acquire sufficient strength to consume the skin of the upper surface, and then only the fine net work of veins is left. And after three or four leaves have been thus gone over, their jaws acquire sufficient strength to devour the whole of the leaf except the coarse vein in the middle and portions of some of the largest veins which branch from this mid-vein. Leaves in each of these three stages of erosion may often be seen in the nest, at the end of the twig where the worms first commenced their operations.

As soon as they come from the shell and commence feeding, the young worms begin to form a web for their protection, by travelling about upon the leaf on which they were born, spinning a fine thread as they go, and carrying these threads around the twig from which the leaf grows, they draw it down and tie it thereto. And as they increase in size they extend their web around the next leaf below, and the next, proceeding downward in this manner, until they reach the fork at the base of the twig. It is in and around this fork that the main nest is constructed, threads being carried from one branch of the fork to another, and also around any other twigs or limbs which chance to grow contiguous thereto. Thus a large irregular web is formed, a foot or more in diameter, loosely woven of threads running in every direction, resembling a mass of cobwebs spun by spiders, among which are the ragged remains of the leaves, and entangled here and there in the threads are dry black grains, the castings of the worms, many of which, on any jar of the limb, shake out and fall to the ground. The silken threads of which these nests are formed, particularly those spun after the worms are nearly grown to maturity, possess a considerable degree of strength, so that they commonly do not become torn away and disappear from the trees, until the sleet and hail of the winter's storms scour and cleanse the limbs from these unsightly appendages.

This worm is a general feeder, subsisting upon the leaves of a great variety of trees and shrubs. I have even met with a nest, in one instance, upon the elder —a shrub which has been currently regarded as most repulsive to insects. And it is, therefore, probable that these worms are able to nourish themselves upon any of the deciduous trees of our country. There are certain kinds of trees, however, of which they are particularly fond, and which suffer greatly from their attacks. The ash appears to be their greatest favorite, especially young thrifty trees of this species. Such trees may frequently be seen, in autumn, wholly stripped of their leaves, and with their trunks and limbs through their whole length coated over with the webs of these caterpillars. The present year this phenomenon is common. Next to the ash they seem to be most fond of the cherry, particularly the wild black cherry, on which tree numbers of their nests may everywhere be seen. In addition to these the walnut, the plum, the apple and the willow are attractive to them. In the orchards in this vicinity more than half the trees have had one or more nests of the Fall Web-worm upon them, the present year.

These worms, or caterpillars as they may more appropriately be termed, are quite variable, the individuals in the same nest often differing very much in their size and colors. When young they are pale, yellowish white, thinly clothed with long whitish hairs, with two rows of black dots along the back, and on each side of each ring of the body three smaller blackish dots in a transverse row with those on the back. When nearly or quite mature, they are smallish caterpillars about an inch long, thinly clothed with whitish hairs of various lengths, interspersed with a few black

ones, these hairs radiating from elevated dots or warts which are black on the back and orange yellow on the sides, the skin being usually pale yellow with numerous black freckles, which on the back are often dense, forming a black stripe, and with a bright yellow stripe along each side, the head and feet being black.

The caterpillars of different nests complete their growth at different periods, from about the middle of August till the latter part of September. They then leave the trees on which they have fed and wander about until they find suitably sheltered situations in which to place their cocoons. These are thin and almost transparent, being formed of a few silken threads w th the hairs of the catterpillar's body interwoven therewith. In these cocoons the insect lies in its pupa or chrysalis state during the winter and spring, and then changes to the milk-white miller or moth first described above.

In addition to this month, which is wholly white, we have two other species of ermine moths in the state of New-York. The caterpillars of these are unknown to me, though they are no doubt very similar to the common species, and form nests of the same kind upon the trees. One of these I described in the Transactions of the State Agricultural Society for 1856, page 383, under the name of the Dotted ermine moth (*Hyphantria punctata*) It is very similar to the common species, but is rather larger, sometimes measuring two inches across the spread wings, which show a black dot in the center of the forward pair, and in the males a row of small blackish spots extending from the middle of the inner margin to the tips. The other species is the Spotted ermine moth (*Hyphantria cunea*) first described by Drury, from specimens captured in the vicinity of New-York city, where it is very common, and appears to supplant or occupy the place of the common species. In this the fore wings of the males are ornamented with numerous small black spots. Otherwise it is quite similar to the two other species.

Though many of these caterpillars hatch in July, it is not until August that their nests become of such size as to be noticed, and those of later broods do not make their appearance until the following month. Orchards should, therefore, be examined, for the Fall Web-worm, at two or three different times in August and September, that these enemies may be discovered and destroyed whilst they are yet small and before any considerable amount of the foliage has been consumed by them. And whenever a nest is found, the limb on which it is placed should be cut off and consigned to the flames. ASA FITCH. *Salem, N. Y., Oct.* 4, 1858.

Suckering Corn.

Carefully conducted experiments bring me to the same conclusion arrived at by one of your late contributors, writing on the subject of "Suckering Corn," namely, that it is not advisable to leave the "Suckers on." My last experiment was on rich new land. On that portion suckered, I had a fair crop of corn for the season. That with the suckers left on gave me a good crop of fodder and a few nubbins on the *tops* of the suckers, but very little corn on the original stock. M. B. B. *Front Royal, Va.*

☞ We have received Vol I, No. I, of the *Kentucky Farmer*, a monthly, each number about the size of ours, published at Frankfort, Ky, by A G. Hodges.

Caustic Lime as Manure.

Will you please inform me what advantage fresh lime has over slacked lime, to apply as a fertilizer to soils. T. D. J.

There is a great diversity of opinion, of practice, and of results in the use of lime as manure. This diversity doubtless arises from the many different ways in which it may operate. 1. If caustic, it may be immediately dissolved by water, and at once diffused intimately through the soil. If mild or air-slacked, it cannot be thus dissolved, but will be slowly diffused, in the course of years, by the action of the carbonic acid brought down from the atmosphere in rain. The question at once arises, which is best—this immediate diffusion, or the gradual solution? The English practice is to combine both,—by applying fresh, water-slacked lime in such quantities that but a part can be immediately dissolved, the rest becoming a carbonate for slow solution. This, observe, is the *practice*, but it is not probably founded on the reasons here given, but on experience merely.

If the quantity of water in the soil at ordinary degrees of moistness, down as far as tilled, is equal to three inches,—then, as water will dissolve but a seven hundredth part of lime, only about eight bushels per acre can ever be dissolved at one time by the water of the soil. This quantity, therefore, may be set down as the extreme limit that can ever be profitably applied per acre of fresh lime, so far as its immediate benefit is concerned. All the rest soon becomes mild, and remains undissolved for years, or until the carbonic acid of the moisture slowly disposes of it. If therefore, 200 bushels of fresh lime are spread on an acre, 192 bushels at least pass to the state of a carbonate before it operates as manure.

This difference in the mode of becoming dissolved, may account for the fact that the application of fresh lime in some cases results in a decided benefit to the crop, even where analysis has shown an ample portion of carbonate already existing—the latter being very slowly insoluble, the former more rapidly so. When air-slacked or carbonate of lime is mixed through the soil, the mixture is merely mechanical, and must remain so for years; but where a proper quantity of caustic lime is applied, it immediately becomes intimately diffused by solution. Hence, there may be instances, even on what are termed lime-stone soils, where a yearly application of a few bushels of caustic material may produce decidedly beneficial results.

It must be observed, however, that even in lime-stone regions, there may be no carbonate of lime in the soil—indeed this is frequently if not generally the case, the lime having been slowly dissolved in the lapse of ages by the carbonic acid brought down by rains, and gradually carried down through the soil and conveyed away by the subsoil streams. For this reason, both caustic and mild lime may prove very useful and tend to restore such soils—it being always remembered that heavy doses, without a corresponding application of yard manure, may injure rather than benefit.

Another consideration should not be forgotten. If *pulverized* mild lime, well intermixed with the soil, requires so many years for its dissolution by rains, what should be said of the practice, not unfrequently

adopted, of spreading lime in *lumps*—in which state, or while it remains so, it must continue nearly valueless for centuries.

Glanders in Horses.

This disease is justly called glanders, (vulgarly horse-ail,) being principally an affection of the glands of the head; but more particularly those of the mucous membranes of the nostrils, or it may extend over the whole mucous membrane of the air passage, involving the whole glandular system of the head and neck.

The disease has been called *simple glanders*, when it affects the nasal passages only, and *farcy glanders*, when attended by an eruption of small suppurative and ulcerative tumors, and abscesses of the glands of the throat. The disease usually appears in the winter and spring, but occurs at all seasons of the year.

A great difference has been noticed in the duration of the disease; it usually terminates in two or three weeks, but may continue as many months. The disease is not generally fatal in its simple form unless it continue for a long time. When it is accompanied with abscess, &c., it may be looked upon as dangerous.

Symptoms.—The first symptoms, are those of an attack of fever, such as general uneasiness, loss of appetite, difficulty in drinking, and sudden debility of strength, and a peculiar kind of noise in breathing, which is usually a prominent symptom.

At a variable time from the commencement of the attack, usually, perhaps, in about three or four days, an eruption of hard pustules takes place; they may be numerous or there may be but a few; they enlarge, and form tumors from one to four inches or more in diameter, which are hard and painful, but soon suppurate, and form ulcers extending deep into the flesh, and discharging a large quantity of purulent matter, which is often extremely offensive.

At the same period, or sometimes not until a week after the disease first commences, the nostrils begin to discharge a mucous or purulent fluid, which is at first yellowish, afterwards dark, from the admixture of blood, and extremely fetid. In some cases it is thin and serous, but more frequently viscid and tenacious, adhering to the sides of the nostrils, forming crusts. The nostrils are more or less obstructed by the swelling of the membrane, so as much to impede respiration, and the horse sometimes dies of suffocation. The animal is often extremely dry, and drinks large quantities of water, and if the back part of the mouth—(fauces) are much swollen, it will nearly all return through the nostrils.

The symptoms named do not all occur in every case, nor always in the order stated. If the animal recovers the symptoms usually begin to decline about the tenth or twelfth day, and in from two to three weeks the horse is quite well.

Cause.—The most frequent and exciting cause of glanders, beyond all comparison is cold; and the effect is especially apt to be produced after perspiration from heat or exertion. Hence the complaint is most common in winter, and also horses that are kept in warm stables and covered with heavy blankets are liable to an attack of the complaint from exposure, and to guard them from an attack, they ought to be well covered when standing out.

Occasionally the direct application of active and irritating powders (such as may be found in dusty or smutty hay,) to the nostrils, may cause simple glanders.

Glanders is also frequently epidemic and contagious. The nature of this *specific cause* is unknown. It is also communicable to man, forming one of the most dangerous diseases. The contagion acts, either through the air, or by contact in the liquid or solid form with the sound skin or the mucous membranes, or by insertion beneath the cuticle. What products of the diseased body are contagious is not exactly known; but the purulent contents of the pustules, and their dried scabs, certainly are so; and it is asserted that the disease has resulted from bleeding with a lancet which has been used in a previous case and not properly cleansed.

Treatment.—In the very commencement of the disease, if the breathing should be labored and wheezing, blood should be taken freely from the mouth; then physic him with sulphur and antimony—half ounce of sulphur and quarter ounce of antimony; if there are signs of an abcess forming under the throat, apply emolient poultices and fomenting baths. When the swelling becomes soft, and the matter fluctuating, it may be opened; first carefully shave the hair from the abscess and surrounding parts, then make a free incision into the most depending part of the abscess; the matter should be gently evacuated, and some strips of adhesive plaster should be passed round the part, so as to keep the sides of the sack in opposition with a moderate degree of pressure. Thus a free exit being provided for the pus, the opposing surfaces of the cavity will often granulate and adhere. If from deficiency of action, this adhesion will not take place, weak stimulating injections may be used—such as sulphate of zinc, sulphate of iron, &c., the proportion being one drachm to the pint of water; make three or four injections a day, keeping the external parts clean with soap and water.

Fumigate his head twice a day with sulphur and camphor, mixed with rye meal and burnt, and occasionally blow snuff up his nose; if the discharge is abundant, inject tar-water up his nostrils, decoction of oak bark, solution of sulphate of zinc. When the discharges are offensive, solutions of creosote, or of chloride of soda, potassa, or lime, will do much towards correcting the fetor, and may prove useful as ultratives to the mucous surface. The horse should be kep upon bean mush, rye mush, &c., and if in the warm season should be turned out to graze in the day time, being stabled at night. A. F. P. *Warner, N. H.*

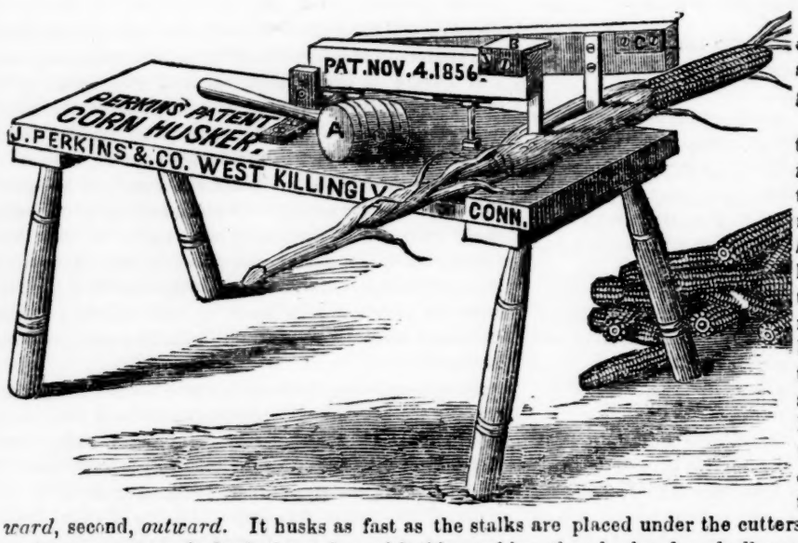
How to Forward Tomatoes.

I would inform your Canada correspondent that I forward my tomatoes several weeks by the following method:

I start the plants in the house quite early, and as soon as the weather will admit, I make a slight hotbed on the south side of a fence or building, mixing a large portion of sand with the soil, and transplant them into it, leaving sufficient space under the glass for them to grow until all danger of frost is past, leaving them covered until they grow up against the glass.

The small yellow variety is earlier than the red, and superior in quality. Wm. F. Bassett. *Ashfield.*

Perkins's Corn Husker.



This machine will husk corn of *any size*, on the stalk, just as cut from the ground.

The operator, seated on the machine, holds *with the left hand*, the ear under the cutters, and with the mallet, *A*, *in the right hand*, striking the short lever, *B*, *downwards*, cuts the ear close to the first row of kernels, (the cutters being in contact or close together when they descend,) then striking the long lever, *C*, *outward*, the ear is pushed entirely out of the husk, being but two motions—first, *downward*, second, *outward*. It husks as fast as the stalks are placed under the cutters; and from 50 to 100 per cent. more corn can be husked per day, with this machine, than by hand, and all severe and painful hand labor entirely avoided. So the inventor claims.

The iron work is of wrought iron, and the machine is warranted not to break by fair usage. The edges of the cutters are to be adjusted one-eighth of an inch above the table.

Size of Machine.—Height, 16 inches; length, 28 inches; width, 9 inches; and weight, 17 lbs. Price, $5 50.

Fall Plowing.

Messrs. Editors—*Late sowing and planting*, to judge from my few years' experience in farming, seems to be the cause to which most frequently the failure of our spring crops may be traced. Late sowing, after hasty and imperfect preparation, in nine cases out of ten, results in a poor crop. Our summers are frequently dry; if the drouth comes on early, the crop is pinched while attempting to root, and can never attain full growth. If it had started earlier, the drouth which now so materially affects the product, would have injured it much less—the roots having a deeper hold upon the soil. This every farmer finds to be the case.

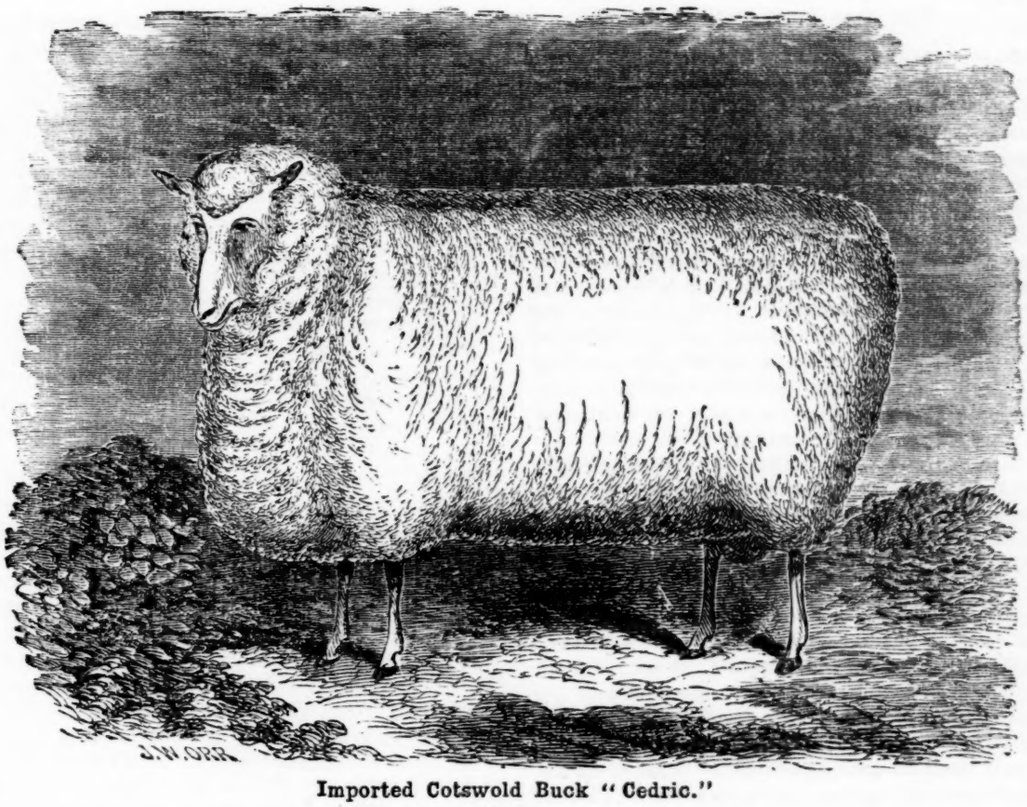
But why do we sow and plant so late when we know the risk taken? Because the spring season is often wet and cold; we cannot plow our heavy soils until "settled warm weather," and then the pressure of work is great—we have barley, oats and corn to prepare for—fences to repair—manure to draw out—a hundred things to do in a few short weeks, and in consequence some must be delayed—none have that *thoroughness* which should be bestowed upon them. In consequence of this delay our barley and oats dry up, our corn is cut by early frost—and not a few of the many things which ought to be done, are totally neglected.

Among the ways of hastening the work within the reach of every farmer, we reckon *fall plowing* as of no small importance. It will mend the matter in several respects. The land latest fit for plowing in the spring, is generally in its best condition in autumn, and needs "the ameliorating influences of fermentation and frost," to fit it for spring crops. We have a case in sight, where a clayey field was broken up late in spring, when too dry, and consequently came up in large lumps—larger, many of them, than the horses' heads. This was four years ago, and the ground has not yielded a crop of much account since, though fall plowing last year, improved the last crop considerably. It is equally injurious to plow when too wet—as was a portion of the same field—though it will do to plow land moister in autumn than in the spring.

Green-sward is better subdued and mellowed by fall plowing, than by that of any other season. The work should be thoroughly done, and the sward will be thoroughly cleared of vegetable growth—weeds and grass turned under perfectly in autumn, do not often make their appearance again. And, by the way, though I would plant corn on manured greensward plowed in spring, I would not sow any other spring crop. I have tried it to my satisfaction; and though the sward was plowed early and well, and harrowed and gang-plowed until in fine tilth, the oat crop was very moderate, and such has ever been my experience on spring plowed green-sward.

Other advantages of fall plowing might be enumerated—such as the state of the team, the price of labor, the hastening of spring work, etc.; but any farmer who will *think about it* will see very readily that it is advisable to plow all that he can for spring-wheat, barley and oats, &c, in the fall, especially on heavy lands.

Let no one try the experiment unless he is willing to do the work thoroughly—as well as if preparing for his most important crop. It is of very little use to turn over the soil in autumn, if you leave it to be covered with water through the winter. It will become as hard as before—the frost produces no favorable effect upon it—and, instead of drying off light and mellow in the spring, it will be baked and hard, fit for no crop, and not readily fitted for one. Plow narrow leads, clean out all the dead furrows, provide carefully for the drainage of all surface water, and as much below the surface as may be, and you will become a believer in fall plowing. A Young Farmer. *Niagara Co., N. Y.*



Imported Cotswold Buck "Cedric."

Bred by William Garne of Aldsworth, Gloucester, England—imported by and the property of G. C. Hitchcock, Ash Grove, New Preston, Conn.

Pig Troughs.

Can you inform me in your next number, the best way of making troughs for feeding pigs? J. W. S. *Chester Co., Pa.*

The simplest and most common way of making pig-troughs, is shown in fig. 1. Two boards are nailed together nearly at right angles at the edges, and a

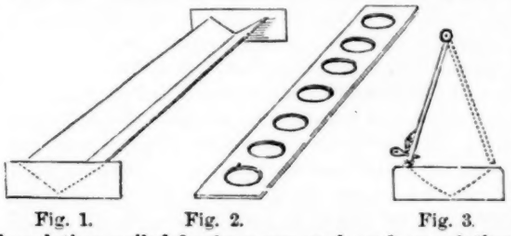


Fig. 1. Fig. 2. Fig. 3.

board then nailed firmly across each end, completing the trough. Ground feed, mixed with water, will soon stop the cracks and render it perfectly tight. Hard wood, not easily warped, white-oak for instance, will last longer, and not be so soon devoured by the pigs. The nails should be stout and frequent. An active farmer will make one himself in less than half an hour. To prevent the pigs from crowding each other, cross pieces are sometimes nailed across the top, dividing the trough into compartments. These, however, prevent the easy cleaning of the trough, which in all good, clean establishments is done at least once a day. A better way, therefore, is to cover the whole with a board (fig. 2) with several holes cut through, which fits within the trough and is pinned down at the ends. This is quickly removed for cleaning. In order to prevent the pigs from interfering with the attendant when he is depositing the food in the trough, it should be placed under a partition or tight fence, and a swinging door hung over it, (fig. 3,) so that when the attendant brings the food, he pushes this door back, as shown by the dotted lines, and then proceeds to fill the trough at his leisure He then swings it forward aigan and gives free access. This door is best fastened back by means of a stout spring latch, although a pin will do.

Cast iron troughs are much better than wooden ones, not being liable to injury from the animals. A plank covering with holes, will answer well, and may be renewed when necessary.

When made of wood, the cross boards at the ends should be long enough to prevent the animals from upsetting the trough, or else should be very securely nailed to the floor or fastened to its place.

(This answer has been accidentally delayed a few weeks—we hope it is not yet too late to prove useful.)

Kicking-Cows.—Cows sometimes move their feet from impatience or restlessness, and sometimes kick for the same reason. Any *invariable* and *prompt* infliction of a short quick punishment will soon cure them. They dislike to have their teats jerked, and if whenever they kick or step, this infliction *always instantly follows*, they will soon cease. It is of the utmost importance that it be always uniformly severe, not irregular, and never but *once* performed for each repetition of the fault.

The New-York State Fair.

In every feature presenting more or less of interest and merit, and, in most departments, exhibiting a gratifying advance upon its predecessors, the State Fair held last week at Syracuse, was not only an example of the advantages of a central location, but also a most creditable witness to the agricultural improvement of the immediate locality in which it was held. Now that it is over, and we have all returned once more to our usual duties, the general results of the week that is passed can but claim a review; and it is matter of congratulation to the farmers of the State that there is room for so much commendation, and that we are saying words, not of compliment but of "truth and soberness," when we add, that seldom, if ever, has such an anniversary been the occasion of so thorough and general satisfaction.

The Exhibition.—In *Cattle*, which stand first upon the Premium List, the Exhibition as a whole was probably never excelled in this country. The only breed wholly or entirely wanting to complete the list was the Alderney, which had we think not a representative on the grounds,—but in Short-Horns, Devons, Herefords and Ayrshires, the first two especially, the turnout was good and large. And no one could have passed the stalls devoted to the Grades, without renewed conviction of the benefit which the importation of improved breeds has been to the country. The different classes of Working Oxen, so far as the writer could ascertain, were remarkably well filled. Some of the Fat Cattle were of immense frame, and perfectly loaded with flesh. In *Horses* the different classes were generally full—if we except Thorough-breds, which were almost or entirely wanting. The show of Stallions of all work, and of Morgans or Black Hawks, is spoken of as very good, and there were some excellent matched horses, geldings and mares. Mules and Jacks were rather deficient. In *Sheep*, the show was very good and extensive, and this was also the case in *Swine*. In *Poultry*, the Superintendent assured us he had never seen a better display, including a wide collection of different varieties, and good competition in nearly all.

The Weather and Attendance.—The heavy showers of the preceding week had, it was hoped, opened the way for clearer skies during our Exhibition, and Tuesday we began to think the promise good for the three succeeding days. Wednesday was very fine, but the wind shifted at evening to south and east, and Thursday we woke to a rain-storm, every hour of which from early dawn until noon, diminished the attendance by thousands. With the fine receipts up to Wednesday evening, and the evident feeling along all the lines of Railroad centering in Syracuse, as well as among the farmers of Onondaga and adjoining counties, there was every reason to anticipate the largest receipts the Society's treasury had ever known. The result as it proved to be, was, in view of the weather, most encouraging—the total being $10,815 81.

Mowers and Reapers.—The collection of these was extensive and valuable. There were several that were new, of which some appeared to possess much merit. Among the newer machines, were those of Bullock & Bros. from Chautauque Co.; J. &. G. Lord of Watertown, who exhibited a cam machine, with an ingenious self-raking attachment; Willard & Ross, Vergennes, Vt.; Gore's New-England mower, a one-horse machine; Wheeler's patent from Shourds & Mosher, Cayuga county; the iron mower of H. Marcellus, of Amsterdam, N. Y.; Parkhurst's Buffalo mower; Tyler's patent, from Washington county; J. V. Wemple's, from Fonda; Hubbard's machine, and others. The older and well known mowers and reapers of Allen, Kirby, Wood, Hussey, Ketchum, Miller and Aultman, and others were also on the ground, including the one-horse machines of Kirby and Ketchum. Some of the new machines were in many particulars imitations of the best older ones, with important improvements in some particulars, and complex encumberments in others. Sherwood's reaper and binder, for attaching to any reaping machine, excited much attention. The operator, by its assistance, will bind as fast as the larger machines will cut, and thus save the labor of several men. Annealed wire is used for the bands, and costs but 15 cents per acre.

The costly and complex corn-huskers which were shown last year at Buffalo, have given place to the cheaper and simpler ones exhibited this year. One of the best of these was the simple and compact iron husker of G Bellows, of Seneca Falls, which cuts the cob, and shoots out the ear with one blow of the lever-handle. A less compact, but equally efficient and perhaps better machine is Gould's patent, also from Seneca Falls. We were rather disappointed with the operation of Perkin's machine, which requires two distinct blows of a mallet to push an ear.

Morrison's patent corn-sheller was one of the best we saw in operation, clearing the cob in a neat and perfect manner, and with ease to the operator—the price $12. Another, known as the "Young America," and invented by J. P. Smith, although hardly as efficient as the former, was greatly superior in compactness, and is offered at $10.

Cahoon's Sowing Machine, both for horse and hand power, was exhibited—the horse machine has proved of great efficiency, and the latter would be also, but for the hard labor it involves to the operator. There were three modifications of the rotating harrow, the amount of merit of which is not yet fully determined. Winegar's gate excited much attention, from the ease of its operation to the driver of carriages without dismounting. The "Parallelogram Gate," of W. Tobey, Naples, N. Y., a new contrivance, is opened and shut by riding on perpendicular levers—it is very simple in construction, but requires further trial to determine its value. There were several modifications of portable fences, the pannels locking together at the ends; some zig-zag and others straight. The exhibitors stated their cost, variously at 45 to 70 cents a rod, but we did not find any that appeared to be faultless—those merely resting on the ground being liable to be upset, and others intended for staking or pinning to the ground being consequently attended with much labor in getting up. It is proper to add, however, that the former may answer well in sheltered valleys, excluded from winds.

Two hand-sawing machines were in operation, one of them from Heth, Hall & Co., and the other from Porter, Kellogg & Co, both of Jefferson county. The former is worked by both hands and feet, the operator standing on a reciprocating platform—the latter by working a lever something like the motion of a pump-handle. The exhibitors claim that the application of the force is so much more efficient than with a common

wood saw, that a great increase in effective work is attained, some five cords of wood being cut from logs in a day by one hand. The price is about $20.

Gladding's patent hay fork was shown in partial operation, and is obviously a valuable contrivance. The hay is raised by a horse, and the load cast off and dropped by pulling a cord. The price $10.

We observed several good horizontal horse powers, among them one from Walrath Brothers of Chittenango, N. Y., compact, well made and quiet running; and another from B. & H. Wakely of McLean, N. Y.

The platform scales from Strong & Ross of Brandon, Vermont, appeared to be of excellent manufacture, and they are said to possess great accuracy.

Emery Brothers as usual made an extensive display of their well made agricultural machinery. Among the objects shown by them, was a collection of plows, their dynamometer, which served so valuable a purpose at the Syracuse trial of implements last year, their good and simple sugar-cane mill, a simple and efficient shingle jointing machine, a clover mill, a corn and cob crusher, a horse-fork, corn-sheller, portable grist mill, horse-power churn, portable cider mill, and last and not least, a set of railway horse-powers, thrashers and separators.

The collection of Richard H Pease, also of Albany, comprised Horse Powers, Threshers and Separators, Circular Saw Mills and Saws, a Clover Huller, and Cider Mill, on which several prizes were awarded.

Wheeler, Melick & Co., also exhibited sets of Horse Powers, Threshers, &c., from their extensive Factory.

One of the most admirably made machines on the ground, was the portable steam engine from A. N. & E. D. Wood of Utica. They have recently made a valuable improvement for confining the fire and rendering the engine more safe and secure. So perfect was the construction of this engine, that the least noise could not be perceived from its active working at a distance of two paces, and of course it was perfectly free from oscillation—a difficulty of a formidable character in some other portable engines.

Among the other articles which we can only enumerate, were Starks and Perigo's spoke planing machine; Birdsell's clover thresher and cleaner; Reynold's band cutter and self-feeder for threshing machines, simple and apparently efficient; Spencer's thresher and separator, from Tompkins county, well made and well arranged; Westinghouse's set of excellent railroad horse powers and threshers, circular saws, &c., and Badger's horse powers. R. C. Pratt of Canandaigua exhibited a simpler and improved form of his ditcher, which is reduced in weight and price to about one-half of the former machine, and we should think much easier to handle and manage.

A collection of plows from Walter Warren of Utica, R. M. Hermance of Syracuse, P. Auld of Utica, Holmes, Stringer & Co., Munnsville, J. & G. Lord & Co., Watertown, and Woodworth, Whitney & Co., Manlius, and cultivators from Sayre & Remington, Utica, J. P. Cramer, Schuylerville, and J. S. & M. Peckham of Utica.

Allen's potato digging plow, and a much more complex digger (costing some $50) from J. E. Hardenburgh, Fultonville, N. Y.

DOMESTIC CONTRIVANCES.

Shaler's carpet sweeper, is a revolving brush, which carries the sweepings from the carpet into a small tin trough, and wholly prevents dust from filling the room. The whole is somewhat in the form and about the size of a common floor brush, and is thrust backwards and forwards across the floor, the motion causing the brush to revolve, and thoroughly to clear the surface.

There were several *sewing machines* in operation, both the old, approved, high-priced machines, and the newer and cheaper ones. Among the latter, the "Home Sewing Machine," from A. N. Dewitt, agent, Buffalo, appears to promise best. The contrivance for forming the loop is very simple and certain, and the machine appears to be of excellent construction. How's spring bed bottom, made of wood slats, hung on steel springs at the ends, appeared worthy of commendation. We observed several forms of the washing machine, which must require trial for judging properly of their merits. Wisner's is modified so as to wash wristbands and collars alike with other parts of garments. Johnson's patent pounder is commendable from its simplicity, and was highly spoken of by those who have tried it. A rotating rubber in a tub, constitutes the washing machine of A. Wood of Camden, N. Y. Swan's combined machine for washing clothes, churning, cutting sausage meat, and cutting roots, excited much attention for its novelty, and its apparent efficiency as a washer, but it appeared too complex, and we think undertakes too much to be good in all.

Roe's cheese-vat and heater appears to be a very valuable assistant to the cheese maker. A few chips will warm sufficiently the large contents of the vat—the cost, $20. Robertson's suspended self-acting cheese press was the simplest machine of the kind we saw upon the grounds—there were several others of a more costly and probably efficient character. There were several "improved" churns, but time and opportunity does not allow us to judge of their merits.

Floral Hall was simple in its structure, and with less elaborate embellishment than some of its predecessors of former years, but was greatly admired for its simple and graceful attractions, the interior being freely and profusely lined with evergreens. It was designed and completed within a few days notice, by W. B. Smith of Syracuse, of the firm of Thorp, Smith & Hanchett. We are sorry it could not have been better filled, although there were several excellent collections of fruits and flowers. The largest contributors of these were Hamilton White and A. Monroe of Syracuse, and Thorp, Smith & Hanchett, who occupied long lines of tables and shelves with an extensive collection of apples and pears, and a profuse display of roses, verbenas, dahlias, petunias, &c., and a large mass of plants in pots. A. S. Moss of Fredonia, presented an excellent collection of native grapes, large, handsomely grown, and well ripened, and among them the best specimens of the Concord we have seen of the growth of this State. G. E. Ryckman of Chautauque Co., exhibited 10 varieties of native grapes, mostly fine and well ripened, and J. M. Mattison of Tompkins Co., several varieties. One of the finest collections of exotic grapes was exhibited by Hamilton White of Syracuse. Fine Diana and Rebecca grapes were presented by Wm. Brocksbank of Hudson. Excellent cranberries were brought by D. L. Halsey of Cayuga, and N. Hill of Steuben. One of the rarest and most valuable collections in the entire hall, was the contribution of pears and plums from Ellwanger & Barry of Rochester—some of the specimens of pears were really superb.

Agricultural and Horticultural Literature.

FLINT'S "MILCH COWS AND DAIRY FARMING."—This work, already announced through our columns, has just appeared, and in a style of typography manifesting a considerable improvement upon that of most previous agricultural books issued in this country. In contents it fills a place long vacant. The author takes up in his introductory chapter, the various races of Pure Bred Cattle in the United States, ranking them for dairying purposes in the following order: the Ayrshire, Jersey, Short-Horn, the Dutch cattle, the Hereford, and the Devon. He then turns to the Grade or "Native" stock of the country, tracing it back to its origin, and treats of the principles that should be employed in breeding. The only point on which we can ground a complaint, among many features worthy of high commendation, is in the matter of illustrations. The portraits are not good examples of the breeds they are intended to represent, and are drawn on a diversity of scale that leaves the reader in some doubt which would weigh the heaviest, an Alderney cow or a Short-Horn bull, so far as the relative size of the engravings is any guide. The "Oakes cow" (p. 73) is a monstrosity of ill-proportion. This, however, now that good portraits of fine animals are so frequently met with, is quite an insignificant point, practically. * * * Chapter 3d treats of the selection of Milch Cows, and furnishes valuable directions, while here the diagrams and illustrations are of great assistance, and all that could be asked; the twenty-two pages devoted to Guenon's system, give a very complete and perfect idea of its latest developments, and will be regarded by many as alone worth the price of the volume. The succeeding chapter on the Feeding and Management of Dairy Cows, raising Calves, the Culture of Grasses and other plants for grazing, green fodder, and curing or cooking,—render these departments very full and valuable. Those on Milk, the Butter Dairy, and the Cheese Dairy, are pointed and practical. The Diseases of Dairy Stock are well and fully treated. The largely illustrated chapters on Dutch dairying are very interesting. The "Letter to a Dairy Woman," forming chapter 12, contains some excellent and important hints. The whole concludes with a consideration of the Piggery as a branch of the dairy establishment, and an Appendix containing Horsfall's Essay on the Management of Dairy Cattle. And it is difficult to conceive how the author could have compressed more that was necessary to the completeness of his work, into its compass, or better arranged the space devoted to the respective subjects involved. A minute examination might perhaps detect room for unimportant improvements, and on subjects in respect to which there is so wide a diversity of opinion, it will be strange if all are found to agree exactly in his conclusions; but as a sound and useful volume, we take pleasure in commending it cordially to our readers, and bespeaking for it their early acquaintance. It can but rank as a standard American Dairy book for some time to come. [New-York: A. O. Moore. Also for sale at this office—price $1.25.]

"THE BARN-YARD—A MANUAL OF DOMESTIC ANIMALS."—Fowler & Wells have just issued this volume in their series of rural manuals. It treats of the Horse, the Ass, Cattle, Sheep, Swine, the Improvement of Breeds, Diseases and their Cure, Poultry and Bee Keeping. Embracing so much within the limits of about 170 pp., one could not expect to find it very full in respect to details, but it affords a judicious resume of the subjects embraced and is written with a considerable degree of conciseness; probably there is no means of getting so much about Domestic Animals at the cost in any other volume. [For sale at this office—paper 30 cts, cloth 50 cts.]

Experiments with Potatoes.

Does the Potato Degenerate?—In answer to this question, allow me to state some facts which have come under my own observation this season. Of some two dozen varieties planted, not more than one-third of them have produced a *single ball.* Six of these, occupying less than three-fourths of an acre of ground, we do not believe produced more than one quart of balls all told. The Early Blues produced some half a pint to a pint of balls to a square rod or so. But some Prince Alberts produced some four quarts to the square rod by actual measure. This would be at the rate of 20 bushels of balls to the acre. I do not think either this town or county has produced from all other varieties put together 20 bushels of balls this season.

Seven stalks of the Albert produced 135 balls, and 60 tubers. One hill of three stalks produced 54 balls and 20 tubers, and one stalk to one hill produced 42 balls and 5 good table potatoes. This last named stalk is an isolated case, and gives a product of over 8 balls to each tuber. The *Albert is without a rival* in producing either balls or tubers. The Albert is tough, hardy, and vigorous, and will endure the blight like the king of vines. His stalks are still green, which, with my Jenny Linds, which are also green, still stand unharmed comparatively with the potato blight, which was never known to be *worse* in its features, or more extended in its ravages than *now* among our common varieties.

Experiments with Salt.—About the first of June last I took up a refuse potato, and began to cut it open; it was black within, and not fit to give to a hog. The chits in part being alive, I resolved to plant it, (or the eye chits,) and after digging down to the subsoil, I put down at least two large handfuls of salt, and returned the earth again. Then about even with the surface, I scattered in the eye chits. After many days four of the chits came up, of a deep green hue, and grew vigorously. Not until just before the last hoeing, did I add any farther stimulant, when I put on two handfuls of compost of hen manure, ashes, and rich earth. These tops continued to grow vigorously until September; but no balls, no blows, and no buds, nor the least sign of a bud ever made their appearance on these tops. I pulled these tops green Sept. 11th, and dug out nine tubers, all sound and perfect up to this date; I intend to plant the same in 1859, and if they continue sound and produce balls, I intend to report the same for the benefit of the reading public. I believe in a warm dry soil, salt as a manure, and deep clean culture, in raising a crop of sound potatoes, and *last*, but not *least*, in harvesting potatoes like other crops, as they ripen—at least their tops, which amounts to the same thing. This is like electricity and steam on this point. "Knowledge is power."

I have as yet dug but five rods of Alberts, one rod of which yields 44 quarts, or at the rate of 220 bushels

to the acre. This rod was salted in the hill, eight inches below the chits, three chits in the hill, twenty-five hills to the square rod, manured with a fork of hog manure upon the salt, and the whole covered with five or six inches of mellow soil, and then in dents made with the hoe inverted, the chits were dropped near the natural surface of the soil, the hills gradually raised by three hoeings, before the last of which a large handful of home-made guano was thrown in among the stalks, composed of four parts hen manure, one part ashes, and eight parts rich earth, mixed together, (dry and fine.) One rod was planted in rows, and done as the other four, salt excepted, and the product in tubers was 40 quarts, or at the rate of 200 bushels to the acre. The salted potatoes ripened four or five days first, without losing their freshness any sooner than the unsalted ones, in respect either to their stocks or leaves

The Kansas potato is unsurpassed for the table by any colored variety, and yields nearly as well as the Albert with the same treatment. Have dug two or three bushels of these, the largest of which weighs 14 ounces. The largest Albert yet dug weighs 9 ounces, but they have very few small in size. The other objection to the Kansas potato is that it ripens in the critical period; if this can be obviated so as to make it a later variety, it will be considered second only to the Albert in excellence for the table, for some time to come.

My *main* object in planting so many varieties of the potato every season, is to find some way to *invigorate*, and then *redeem* the whole. I do confidently expect to show by the end of twelve months, a true method of working out full "redemption" for the potato crop.

The solution of this problem is connected with the establishment of the equilibrium in the development of the stalk and root of the potato. On this critical point, man's ingenuity will be taxed to the utmost stretch for some time to come, as it has been in time past.

To *discard* the use of manure in growing a crop of potatoes, is *not* likely to accomplish the *greatest discovery* of this or any former age of the world. J. C. CLEVELAND. *Torringford, Ct., Sept.* 16.

Corn in Hills and Drills.

This subject was alluded to at the recent evening discussions at Syracuse, and several remarked that they had found drills, or hills thick in the row in one direction, to yield considerably more than hills three or three and a half feet both ways. A gentleman present from Rhode Island had raised over 100 bushels of shelled corn per acre, by planting in hills 3 feet by 18 inches, on highly manured, deeply plowed land.

All present admitted the larger yield from this mode of planting, but some thought the additional product not sufficient to compensate for the extra labor in cultivating but one way. We think this depends much on the way in which the corn is planted and the condition of the land. If planted by *hand*, the thick rows require greater labor for this operation; and as all hand planting must be more or less uneven, the cultivator cannot be made to run very closely to the rows. But if the corn is planted with a machine, the case is quite different. We have used Billings' corn-planter, dropping the rows three and a half feet apart, and the hills 20 inches in the row. The *evenness* with which the rows were planted, admitted the very close working of the cultivator; the planting is as easily done in thick as in thin rows. If the land is free from the seeds of weeds, no hoeing is needed in either case.

We would therefore recommend as a general rule, where a planting machine cannot be had, and where the ground is weedy, to plant in squares and cultivate both ways; but on rich, clean land, and with the use of a planter, the drills or thick rows will be decidedly preferable. In other words, hills in squares are best for ordinary farming, and drills for the most improved management. The latter usually gives one-fifth to one-third more corn per acre, according to the measured experiments which we have performed.

Mr. Chapman's Sale of Short-Horn Cattle.

Thre was a good attendance at Mr. Chapman's sale on the 5th inst, and the prices obtained show that there is still a good demand for Short-Horn cattle. The ten cows sold, averaged $370.50 each.

Cows.

1.	Dutchess, D. Tallmadge, Bound Brook, N. J.,	$215
2.	Beauty, (by private sale to A. B. Conger, Haverstraw, N. Y.)	
3.	Hilpa IV, Geo. E. Stone, Geneva,	300
4.	Apricot, E. Cornell, Ithaca, N. Y.,	500
5.	Jacintha, (died previous to sale)	
6.	Romelia, Hon. A. B. Conger, Haverstraw,	320
7.	Garland II, do. do.	425
8.	Lady Booth, E. Cornell, Ithaca,	510
9.	Ruby II, E. Fellows, Chili, Monroe Co.,	410
10.	Gazelle, V. I. Birdseye, Pomprey,	440
11.	Victorine, D. Tallmadge, Bound Brook, N. J.,	185
12.	Bright Eyes III, E. W. Sheldon, Sennett,	400
13.	Lady Sale IV, (by private sale to A. B. Conger.)	
14.	Wreath, (withdrawn.)	
15.	Bright Eyes VIII, (withdrawn.)	
16.	Hilpa VIII, (sold previously.)	

BULLS.—Of the Bulls offered, only three we believe were sold—"Jacintha's Oxford," to Hon. Wm. Kelly, Rhinebeck, at $150—"Plato," to V. I. Birdseye, at $100, and "Pluto," to G. E. Stone, Geneva, at $50. These were all calves, the last only five or six weeks old.

P. S. We learn that Mr. C. afterwards disposed of his bull "Duke of Oxford," to Mr. E Cornell of Ithaca, for $1,500.

Prince Albert and Peach Blow Potatoes.

MESSRS. TUCKER—I forward you a barrel of my potatoes—Prince Alberts, with a few of the Peach Blows. I have raised many different varieties this season, but find nothing that suits me equal to these two. They have been on exhibition, and were awarded the first premium. The Prince Alberts took the first premium at the State Fair in 1857, both on the best acre, and for beauty and good quality. I have a field of nearly four acres that will yield over 375 bushels per acre, take the lot through. So far as they have been dug, the yield is over 400 bushels—many of them 8 and 10 inches in length, very white and very smooth and straight. The Peach Blows have yielded nearly the same with me this season. They are both hardy varieties.

My method of cultivation has been for the last two seasons, to plow my ground in the fall; in the spring manure, from 25 to 35 loads to the acre, and plow it under. Distance of planting, 3 by 3 feet each way. Quantity of seed, 4½ bushels per acre. I use the smallest seed that I can procure, two pieces in a hill and two eyes on each piece. I also use a top-dressing of hen manure, leached ashes and plaster—two parts ashes to one manure and one of plaster—apply a full hand to the hill when they are about two inches high. GEO. MCMAHON. *New Milford, Conn., Oct.* 11.

Evening Discussions at Syracuse,

AT THE STATE FAIR.

Deterioration of the Barley Crop.

The failure of the barley crop in many parts of the country being alluded to by several gentlemen, Mr. Clark of Oswego, stated that when formerly it was largely grown there, he regarded it as a very exhausting crop, and he thinks this explains the reason of its failure. One gentleman stated that some years ago, he sowed a peck, and it gave him two and a half bushels—he sowed this product on an acre, and obtained sixty bushels, worth then one dollar per bushel—equal to the interest on 600 dollars per acre. G. GEDDES said that Onondaga formerly produced more barley than the whole State of Massachusetts. He has found it a very sensitive crop—easily affected by wet and heat—that it requires for success a heavy soil—it will not succeed well on light gravel—it now *averages* about 20 bushels per acre; some raise 40, others but 15. He thinks it is going to decrease—the midge destroys it; and often when a large crop is considered certain, dry weather will dwindle it to a very small amount.

Dr. WELLS of Seneca county, said many farmers had raised large crops—he had heard of 70 bushels per acre—the soil he spoke of was mostly strong or clayey. He thinks the larger crops are winter barley. Judge ENOS of Madison, said he had raised good barley for thirty years until within three years—now he could get but 10 bushels per acre—the Hess barley has given him 50 bushels per acre. He does not know any cause for the failure; he treats his crop now precisely as formerly—it has never rusted—the soil is in as good condition as ever, being manured on corn. He has had 75 bushels of shelled corn per acre, but only 15 bushels of barley after it. Mr. BROWN of Wayne, said that a first crop of barley was good, but the second only straw—and that barley would not do after barley. Judge ENOS said he had a second crop with 50 bushels per acre, but the land had been well limed before it.

SQUIRE M. BROWN of Elbridge, had had good success till the two last years,—the crop now fails—he never sows barley after barley, but after well manured corn. In one instance it only half headed out, possibly from the heat, but he knows of no other cause. His barley this year weighs 46—he has had it 53 lbs. He had found a great increase from the use of salt, and that it proved highly beneficial in several instances, giving him in some cases 50 bushels per acre, and only 33 bushels on unsalted land alongside. He sows five bushels of salt per acre. He thinks salt excellent in manure, and will prevent it from *burning*.

W. A. MILLS of Livingston Co., said they had raised less in that county than in other places—formerly he had 40 bushels per acre on large fields—now but 18 bushels. He attributes failure last year to the wet and hot summer, and it rusted. It was better on the cool, dry hills. Winter barley has succeeded well the present year, 35 bushels per acre – sowed two bushels per acre, with but little care. Barley generally rusted on the Genesee Flats. C. WINEGAR of Cayuga, had a good crop formerly, and a poor one this year, but he thinks it was from bad culture.

GEO GE GEDDES said the usual rotation was corn, barley, wheat, grass, &c. DUNNING of Cayuga, said the two-rowed had proved much better than the four-rowed, the former yielding 10 bushels the most. In Cayuga they first plant corn, *with* manure, sow *early*; the soil is good enough to give them commonly 50 bushels of shelled corn per acre. After corn they grow barley, and then wheat. He thinks the average crop last year was 20 bushels, this year 25 bushels—formerly the crop was 40 bushels. He attributes the failure this year to the maggot in the straw. C. WINEGAR had nearly destroyed his animals by foolishly feeding barley straw to them. GEO. CLARK of Otsego would suggest to make barley follow wheat, instead of the reverse as now. He had known seeding down with barley to be a good practice. Mr. BAILEY, of Kent Co, Michigan, has raised barley on new soil—3 years ago he had 30 bushels per acre—last year 15—this year but 8, and on land that yielded 157 bushels of ears of King Philip corn per acre. He finds the two-rowed the best. He thinks the failure partly owing to unusually unfavorable seasons.

Col. BREWER of Tompkins, has raised barley for 8 years—for 7 years it has averaged 35 bushels per acre—he sows on clover sod, and it proves one of the best crops to seed on He finds it nearly impossible to seed land on clover sod, if the soil is sandy; but easy on heavy soil. He finds "pine straw" on light soil to spoil land—has discovered no advantage whatever from lime. He has made very poor land "too rich," or given it too much vegetable matter, by repeatedly plowing in clover. It was so poor before, that it had been sold at $4 per acre. Ashes had been useful on his land, salt not. He has tried lime, with no benefit whatever, and subsoiling without any use but once. He does not like deep plowing—prefers 3 or 4 inches deep—he had cropped such land, and had obtained larger crops from 3 inch plowing than from 4, 4 more than 5, and 5 more than 6. C. Winegar asked, "do you ever get 100 bushels of corn per acre?" "No." "No, nor never will, was the rejoinder.

LEWIS MARSHALL of Orleans had known something of winter barley for the last eight years—it has been sown in spring, and the result has been very good—it was sown in March, and yielded over 40 bushels per acre, and over 50 lbs. per bushel. It does not always stand the winter—this is the great difficulty—but when it does escape, it gives a fine crop. The midge has spoiled his two-rowed spring barley, but never affects the winter barley—the latter ripens about the first of July.

Mr. GOWDY of Lewis county, said barley usually succeeds well in that county—they do not plow much, but go largely to dairying and grass crops. Barley is poor this year.

Dr. VAN SLYCK said the rotation in Wayne county, where they had long raised barley, and always with success, except in the wet season of last year, is clover two years, then summer fallow and barley, then wheat seeded down. The land must be in good order, as much so as for wheat or corn, and it must not be a "catch crop" This neglect to give it the best chance, he thought the reason of the failure lately. White barley is much the best; they scarcely ever fail to get 40 or 50 bushels of this sort per acre. A neighbor had 54 bushels per acre. It is better, and is used for making pearl barley. Good wheat-land will grow good barley always—clay land is rather the best. It should be drilled in, as being less likely to kill out by winter.

GRAPES.—T. C. PETERS wished Col. Brewer to state as a comment on the subject of shallow cultivation, his

mode of raising the delicious grapes seen a few years since at his place. He answered by saying that he first dug *six feet deep*, and filled with bones, rich soil, manure, &c.

Corn Culture.

T. C. PETERS of Genesee county, said the best practice was to manure in the fall, plow late, say May 20, not over four inches deep, which is better than eight inches. Such treatment has given 50 to 60 bushels of shelled 8-rowed corn per acre.

G. GEDDES pointed out the importance of discriminating between one soil and another, in deciding what depth to plow. Some light and deep soils did not need deep plowing—others of a heavier character absolutely required it.

E. CORNELL of Tompkins, gave 30 loads of yard manure to an extremely poor and exhausted piece of land, plowed as deeply as possible, cultivated well, and had 80 bushels of shelled corn per acre—he had had 123 bushels of shelled corn per acre, as the result of deep plowing, good manuring, and thorough cultivation. The corn was weighed early in winter, which G. Geddes thought would dry 20 per cent. by next summer.

A gentleman of R. I. had manured highly, plowed deeply, and planted 3 feet by 18 inches, and was rewarded with over 100 bushels of shelled corn per acre. Several gentlemen found that this mode of planting gave a heavier crop than 3 feet each way, but was attended with more expense in cultivation.

Editorial Correspondence.

The Exhibition of the Ontario Co. Ag. Society at Canandaigua, came to a somewhat abrupt conclusion Thursday afternoon. After a delightful day, which was taken advantage of by crowds from all parts of the county, there came up between four and five o'clock a most sudden and severe storm, which upon any other Fair Grounds would have been productive not only of vast inconvenience, but also of immense damage both to the clothing and to the health of the people in attendance. But under the protection afforded by the large and commodious structure, which in the form of an Amphitheater adorns the grounds, and proves both the enterprise and the good sense of the Society, this concourse of thousands was almost completely sheltered, while the permanence and firmness of the building was thoroughly tested by the gale.

The Co. GENT. has at different times contained allusions to the structures and the energetic management which places Ontario County in these respects in the van, but the writer was scarcely prepared for the reality. The amphitheater spoken of, is more complete throughout than similar erection on the exhibition grounds of the west and south-west. It surrounds an open circular space of a hundred and fifty feet diameter, which forms the ring in which all the prize horses and cattle are adjudged, and in the center of which is the judges' stand and flag-staff. This circle of 150 feet diameter forms of course the interior side of the amphitheater open upon the ring; and the outer wall in a concentric circle of 210 feet diameter surrounds this, which is boarded closely up from top to bottom, containing windows enough for the admission of light, but thus excluding the sunshine, wind and rain. A span roof covers the whole, it being 22 feet from the ground to the plates on which the roof rests. The interior is fitted with 7 tiers of very comfortable seats, rising one above another, with a balcony or passage behind them 12 feet wide. In this balcony, along the outer side of the building, runs a counter three feet wide for the exhibition of domestic manufactures, &c., &c., while upon the wall above it hang other contributions to the show, such as paintings and light goods.

Here a great deal can be accommodated in a good light, easily seen and accessible. Then below the tiers of seats there are extensive apartments fitted up for refreshments and the use of ladies, and long halls to accommodate all the fruit, flowers, vegetables, dairy and other products and lighter manufactures.

It will thus be seen that a great deal is well arranged above and below, for which the shelter is perfect, and all under one roof. The extreme circumference of the whole is 659 feet. The capacity of the seats above must be five or six thousand, while an estimate based on actual count has shown that including the passage ways which are often fully crowded with those standing up, 7,500 can look down upon the progress of events in the arena. Then there are, beside, the rooms already mentioned underneath, so that it is calculated that on the whole at least 12,000 individuals can be protected from a storm. Too much can scarcely be said of the advantages of such a building, and I think there is no doubt but the amphitheater with the fittings up described, is the best form in which the money of a Society can be expended. During a rain that occurred the first show after its completion here, the officers of the Society assured me that enough had been saved to the people of the county in the protection of themselves, their clothing and their goods from injury, to pay beyond question for the whole expense incurred.

As to the STOCK, I had but a glance at the whole, and therefore cannot go into details as much as would be desirable. The storm prevented my going around with a Note-book the second time, as I expected to have done. But as a whole, I can say it was creditable to the county, and exceedingly good in several classes. There were not many pure *Short-Horns* shown. There was quite a turnout of *Devons*, mostly I think from one breeder, and first-class animals. There were several very good yoke of *Working Oxen*. The exhibition of *Sheep* was large and good in all the departments of fine, middle and long wooled. The Downs especially were well represented. The show of *Swine* was quite extensive and very excellent. There was a fair show of *Poultry*. Of *Horses* I only saw the turn-out of mares with foal by the side, and that of stallions, both of which were well filled classes, and unusually good for a county society.

Thursday afternoon Major DICKINSON of Steuben delivered the Address. He was listened to with unflagging attention for nearly an hour and a half, when the rain coming up he was forced to retire amidst numerous cries of "Go on," "Go on." It was a discursive speech, delivered with that entire ease that arises from an extensive knowledge of farming operations of nearly every kind, in all their details; and no one who heard it, could have gone home without some new and practical idea leavening the whole lump of his practical experience. It was quite interesting to see several old farmers go up after its conclusion, to shake the speaker by the hand, and compare their modes of cultivation and opinions on matters and things, with his.

Inquiries and Answers.

Disease in Skin of Horses.—My father-in-law has a young mare that has very impure blood. For the last two summers she has broken out in blotches, and through gnawing and rubbing herself, she is at times nearly covered with scabs. In the winter her skin and hair become smooth, and she appears free from any disease. If you can make out what disease it is by this description, and know what will cure it, will you please inform me through your very valuable paper. R. J. *Suffield.* [Poultry-lousiness in horses is sometimes extremely troublesome, but it may be determined by the presence of the insects on close examination, and it does not intermit, as described above. It may be the mange or itch, but more probably a mere cutaneous eruption of the skin from bad digestion. We would propose the use of the same diet in summer as winter, with a mixture of a tea-spoonful of sulphur in the food at each feeding. Daily sponging with a weak solution of saleratus water, in which there is a slight mixture of sulphur, will probably be useful, covering the body with cotton or linen instead of a woolen blanket, after the sponging. Should this treatment be employed, we would like to hear the result]

Pine Seeds, &c.—Will you or some correspondent inform me the proper time to gather the cones of the yellow pine—and how and when to plant the seed? I presume there is a seed under each leaf of the cone. Please advise an entire novice. Is the seed for sale at the seed stores? Also as to the time to gather seed of the cedar and how to plant them. Isaac Dillon. *Zanesville, Sept.* 1858. [Cones are usually gathered late in autumn, dried in winter till the seed drop out and planted early in spring. To protect the young seedlings from the hot sun in this country, a screen or shade is usually necessary the first season. Seeds of most of the species of pine are sold by J. M. Thorburn, of New-York, and by Thomas Meehan, of Germantown, Philadelphia. There are several quite distinct kinds of cedar—to which does our correspondent refer ?]

Grapes and Peaches.—I wish to inquire the names of the three best varieties of native grapes for dessert use. I have the Catawba, Isabella and Herbemont. Also the best selection of Freestone Peaches for market—including the earliest to latest. J. C. *Clermont Co, O.* [So far south as Clermont Co., where the Catawba ripens well, the Isabella, Catawba, and Delaware will be best. *Peaches*—Serrate Early York, Early Newington, Cooledge's Favorite, Large Early York, George IV, Crawford's Early, Nivette, Red Cheek Melocoton, Oldmixon free, Ward's late free, Crawford's late.]

Draining.—I wish to know the proper method of constructing a drain under the following circumstances: The Erie canal crosses our farm. The banks are, in some places, six or eight feet above the surface of the adjoining fields. There is at some portions of the bank, so much leakage of water through the bank as to cause serious damage to land and crops. A ditch is already dug along the foot of the bank, leading into another ditch, which conducts the water across the lower portion of the field—there being a gradual descent of the surface, favorable for drainage. This, of course, carries off the water. Now we wish to cover the drains which lead the water across the field. If the drain or ditch which runs along the bank, parallel with the canal, is left an open drain emptying into a covered drain, will not the water in the former carry in the particles of soil so as to obstruct the latter? If both are covered, will it be likely to catch the leakage, and prevent its flowing across the field? Others of your subscribers may be in a similar situation. An early answer will oblige, as we wish very soon to fill the drains. F. L. W. *Reynale's Basin, Niagara Co., N. Y.* [We have often observed the leakage from the canal bank near Reynale's Basin, but do not distinctly recollect the quantity of water thus escaping. If it is but small, it will readily find its way down through the soil into a tile-drain; if more copious, the drain should be partly or nearly filled with small stone, on the top of which may be placed several inches of coarse gravel, as the case may require. We would not, by any means, have an open ditch discharging directly into a covered one]

Efficacy of Under-drains. — If a wheatfield in our soil (principally a clay loam) is not plowed in narrow lands, and the furrows between left open to carry off the surface water, and good outlets provided at the lower points in the field, so that the water may pass off, we expect that the crop of wheat will be *minus.* Will under-drains, two or three rods apart, prevent the necessity of narrow lands and open furrows? We are obliged to shovel as much in clearing the furrows as will dig some rods of ditch. If under-drains will do the work, the shoveling would not need to be repeated for every crop. F. L. W. [Good covered drains, two and a half to three feet deep, and two rods apart, will completely obviate the necessity of the ridges and furrows alluded to; they will admit of earlier plowing and better tillage; will afford much better crops; and in several other particulars be incomparably better than the temporary open furrows.]

Hemlock Screens.—*Z. F. A.* The hemlock hedge, described by our correspondent, of trees varying from one foot to six in height, may gradually after a lapse of years, be made to approach a uniform screen, by keeping the whole well cultivated so as to hasten the growth, and by *shortening back*, (not shearing) the larger trees, both at the sides and tops, so as to allow the smaller ones to grow freely.

Propagation of the Blackberry.—Will you please give a few minute directions through the Cultivator, in regard to the best manner of propagating the blackberry. J. H. Osborne. *North Weare, N. H.* [The easiest way is to cut down the bushes very early in spring, which will cause suckers to spring up in great profusion; these may be taken up and set out the following autumn or spring. The most rapid way, but more laborious, is to place cuttings of the roots, about two or three inches long, in propagating boxes, buried just beneath the surface of the earth, and to apply bottom heat—a hot-bed will do. This should be done very early in spring, and when well started, the plants are to be carefully set out, and will make good bushes by autumn.]

"Life-Everlasting."—Will you please inform me what is the name of the enclosed weed, which came up from sowing grass seed, and is rapidly on the increase on my farm? I now save my own grass seed, which, by the way, every farmer should. J. F. B. *Unadilla Forks.* [The plant sent is the *Gnaphalium*

polycephalum, or "life-everlasting," a common weed in pastures, &c., in some places, but not a very pernicious one that we are aware of.]

HAY-CAPS.—In answer to your inquiry as to a composition for hay-caps, I consider from an experience of five years, any thing of the kind entirely useless. Get the best muslin, Amoskeag or Lawrence Mill A, and a week's rain will not go through it. Thin muslin will not do, and it must be yard-wide, as less than two yards square is too small. Do not buy cheap or small hay-caps. W. H. DENNING.

WHITE RYE.—Will some of your readers, who may have White Rye, clean and pure, drop me a line stating price per bushel? JOHN A. ROBINSON. *Belcher, N. Y*

POTATOES FOR HOGS.—Please inform me whether Irish potatoes are good to fatten hogs, and how they are best fed. SUBSCRIBER. *Turnwald, Ga.* [Raw potatoes are only a moderately good feed for hogs—raw apples are somewhat better—but steamed potatoes, mixed with corn meal, make a good food for fattening. The steaming will, however, only *pay* when done on a pretty large scale and with the best facilities.]

CONCORD GRAPE.—Will some of the growers of the Concord grape, having roots to sell by the *hundred*, at something less than multicaulis prices, inform the readers of the Co. Gent.? This variety has now been cultivated long enough to be sold at a reasonable rate. W. *Adrian, Mich.* [The answer to this should come in the shape of an advertisement.]

INDIAN RICE.—Professor Kennedy says that this article is purchased of the Indians clear, for one dollar a bushel. I should like to get some. I had a small quantity some years since, but learning that the Indians gathered it in their canoes, I suppose I sowed mine too far in the water of a small lake bordering my farm. I should probably know better if I had a second opportunity of trying it. W. T. L.

Chautauque County Fair.

FREDONIA, Sept. 27, 1858.

EDS CO. GENT.—Our County Fair came off Sept. 21st, 22d and 23d, in our village. It has been a triumph, outstripping any former exhibition of the kind in our county.

The weather was favorable, and our beautiful show grounds of about 18 acres, were literally alive on Wednesday and Thursday. The sobriety, good order, and good feeling, were subjects of remark by guests from abroad. Over 15,000 persons were on the grounds the last day. The entries were over 1,400. In horses, cattle, sheep, swine, poultry, the dairy, floral hall, domestic manufactures, and vegetables, we were unsurpassed by any former exhibition. Mechanical and farm implements, together with fruits, (of which there is but little in our county this year,) there was not a usual display.

The annual address was delivered by the Hon. A. B. DICKINSON, and was listened to with deep interest by the vast multitude. It will afford subject for thought to the practical farmer, and serve to direct the inquiring mind into the path of knowledge.

Our receipts were over $1800, and we shall pay over $1,000 in premiums. We are out of debt, and have funds on hand. Our next Fair is to be at Jamestown. A. F. ALLEN, Prest; Sydney Jones, Sec., and Rich'd Baker, Treas., for 1859. A. S. Moss.

Sterile Grapevine.

MESSRS. EDITORS—A few years ago I set out a grapevine. I have taken great pains with said vine from that time till the present, pruned it every fall, manured with old bones, wash from the house, &c., yet it has not borne a grape. It blows full, and then comes the blasting, and they are all gone. Now, Messrs. Editors, can you or any of your subscribers give me any information what to do? Cut down, or try another year? Some say there is a male and female root—one was destroyed in transplanting—therefore the vine is worthless; others that the vine would bear if a bud was inserted in the main vine, &c. Please give your opinion. H C. *Burlington, Vt.*

The American grapes are often diœcious, or with staminate and pistillate flowers on distinct plants, but this remark does not apply to the cultivated sorts, which are chosen because they bear. A sterile vine cannot be propagated from a fertile one, by layer or cutting, but only by seed. If, therefore, our correspondent had mentioned the kind or variety of his vine, we might have been able to say whether the sterility was accidental or incurable. The diœcious character may be certainly determined by examining the flowers, but that will require another season. It is not probable that the vine alluded to is of any value; and we would therefore recommend replacing it with some early sort which will ripen well in Vermont, the Delaware for example; or else graft it with some desirable grape.

Mulching.

We observe on looking over the published proceedings of the American Pomological Society, that several members expressed their disappointment with the practice of mulching. We are not at all surprised at this, but only that some had not found it out sooner—as the operation is generally performed. We have seen many trees mulched, and nearly all with only a small circle around the foot of the stem, covering perhaps but a twentieth part of the spread of the roots, which extend over a surface about twenty times as great as most planters suppose. We have always maintained that the best mulch is mellow pulverized earth, for promoting the growth of the tree. Covering with straw, litter, &c., are, as a general rule, only to be recommended in such places as cannot be subjected to cultivation conveniently, such as yards, gardens, &c., but even here we could not advise it, unless widely spread and deeply applied about the trees. When there is any danger from mice, a mound must be first banked up about the trees, of clear earth, and the mulching spread at a short distance off; and unless intended for protection from winter, it should be carefully raked off in autumn, or it will invite the attacks of mice

We find that some other old errors were not wholly excluded from the discussions of that body,—as for example, "mulching with a growing sod." What sane man would mulch his potato and cabbage crop with a growing sod—or in other words set them in thick grass? If those members will go back a century or two, they will find that old Dr. Hales discovered the prodigious amount of moisture which grass constantly throws off into the air; and if they will ask any farmer, good or bad, he will tell them that a thick mat of grass among his corn crop is no help to it. The same rule will apply to *trees*—they do not reverse the laws of fertility and growth.

Notes for the Month.

A Book for Dairymen and Farmers.—We are pleased to learn that C. L. Flint, Esq., the able Secretary of the Mass. State Board of Agriculture, has in press a work on Dairy Farming, now nearly ready and soon to be issued. It embraces a sketch of the different breeds of cattle, especially the dairy breeds; the principles of breeding, the selection of milch cows, with a complete explanation of Guenon's method; the feeding and management of dairy stock, the raising of calves; the details of the milk, the butter, and the cheese dairies; a valuable chapter on the Dutch Dairy, translated from the German, and containing all the modes of making butter and cheese in Holland, where this branch of farming is carried to the highest perfection; a Letter to a Dairyman, containing many important suggestions; the Piggery, as a part of the Dairy establishment; the Diseases of Dairy Stock, an exceedingly important chapter, in the preparation of which Drs. Dadd, Wood and others have been consulted; to which is added Horsfall's System of Dairy Management, now first published in a form available to the American public. 12mo., 416 pp. Retail price $1.25. Published by A. O. Moore of New-York, J. B. Lippincott & Co. of Philadelphia, Rickey, Mallory & Co., Cincinnati, and A. Williams & Co., Boston.

The drawings and illustrations have been got up expressly for the work, at a cost of over $300.

American and English Ideas of Independence.—In reply to an application from the Editor of the *North British Agriculturist*, we recently communicated to that Journal some facts in relation to the Guano trade of this country, and also sent a copy of the published proceedings at a Convention held as readers may remember, some two years ago at Washington, at the meetings of which the subject was pretty thoroughly ventilated. This Convention, which attracted little or no attention here except in those sections directly interested in the use of large amounts of Guano, and was there considered quite a matter of course,—really excites the astonishment of our contemporary. In Great Britain it would almost have been considered a revolutionary movement. Read the following paragraph:

> The proceedings are valuable from the facts communicated, and also from the illustration the Convention presents of the character of American agriculturists. While the greatest difficulty has always been experienced in the United Kingdom in obtaining an agricultural deputation, and while these deputations have mainly consisted of Members of Parliament resident in London, a Convention of farmers meets in Washington—invites the agricultural committees of the Senate and House of Representatives to take seats in the Convention—continues their sittings for several days, and adopts memorials which were formally presented to the President of the Union! That this was an undue prominence asserted by practical agriculturists seems to have been conceived by no one in the United States, though a similar movement on the part of British farmers, would awaken not only surprise, but possibly create some alarm at such a display of independence and self-action. Most parties, however, will believe that by this ready and general co-operation, American agriculture has an element of power, the absence of which has been frequently presented in the past of British agriculture.

English Beans in the United States.—The *N. E. Farmer* speaks os the large varieties of beans, such as the *Flowering Marsh*, which are raised in large quantities in England for feeding horses, and says—"This practice has not found favor in this country yet, probably from the want of some one or more to lead in it." We have planted the bean spoken of, and know of others doing the same, but no success ever attended the experiment in our own case, or, as far as we know, in any other. The climate seems unsuited to their perfect growth—they flourish well for a time, and then turn black, shrivel up, and fail, partially or entirely, in producing fruit.

Cochran's Agricultural Book-Keeping.—In reply to numerous correspondents who have inquired where this may be procured, we desire to state that we have obtained from Mr. Cochran of Detroit, some sets of his books, which are for sale at $2 each—or $2.30 where we have to send them by mail, pre-paying postage. It will be remembered that this system of keeping farm books has not only received the approval of many who have examined it carefully, but that several of our correspondents have tried it in actual practice, and found it to meet their highest expectations. Each set includes a book of instruction in the system, and blank Day Book and Ledger.

Fine Pears.—Messrs. Ellwanger & Barry, Mount Hope Nurseries, Rochester, have our thanks for a basket of as rich and well-grown pears as one need desire to look upon, or to eat. May no blight ever come near their trees!

Maine State Fair.—Extract of a letter from a subscriber, dated Saco, Sept. 29:—"Our State Fair went off very well last week—best show of stock we have ever had."

Sales of Horses.—An auction sale of horses took place at the close of the late exhibition at Springfield, when eight or ten horses were sold. Sontag's colt was bought by Hon. W. H. Ladd of Ohio, for the sum of $1,500. Nicholas, a Messenger and Morgan stallion, owned by John Maynard of Hollis, N. H., was sold to Mr. Chamberlin, for $1,025. The thoroughbred stallion Hard Times, was put up at $2,000, but was not sold. The other prices were from $150 to $350. The Ohio Farmer states that the Messrs. Ladd of Richmond, O., have sold their famous "Old Bush Messenger," to Gen. John S. Goe of Brownsville, Pa.

The Peach Tree.—Some years since there appeared in a paper which I took, a communication promising a discovery of the writer's, (which he said he had thoroughly tested,) for rendering the peach in all situations, a healthy and long lived tree. I looked eagerly for the promised secret, but it never appeared. M. M. B. [Many such *supposed* discoveries are announced without due consideration. Probably the writer's further experience convinced him of his error]

The Sorgho amd Imphee in France.—Mr. Howard, in his last letter from Paris, to the Boston Cultivator, says—"The Chinese Sugar Cane is chiefly cultivated here for *distillation*. Messrs. Vilmorin, Andrews & Co., inform me that the difficulty of obtaining sugar from it is so great, that the plant will not be grown in France for that purpose, though they think it will be profitable for making alcohol. I should remark in passing, that Messrs. V., A. & Co., assure me that the *Imphee*,—the variety of Holcus about which there has been considerable talk in America,—has not proved an object of cultivation in France, yielding less saccharine matter than the common Chinese Sugar Cane."

A Good Rule on the Farm.—A rule which would teach careless hands what no amount of instruction can do, is suggested by the *N. E. Farmer*, viz: If ony one use an implement or tool for purposes for which it was not intended, and *breaks or injures* it, he shall *pay the full damage*. For instance, if a man uses a shovel instead of an iron bar for prying stones or roots, and breaks it, let him pay the amount required to make it good; and so of every implement injured by sheer misapplication or carelessness. Hay-forks were made for pitching hay, but they are often broken by throwing down upon the floor, the jar making the tines fly like glass. The Editor says: "If every tool on a good-sized farm were always clean and in its place when not in use, it would be worth the interest on two or three hundred dollars annually, to most farmers." The subject needs more attention.

The Exhaustion of the Soil.—We have received a letter all the way from Newton county, Arkansas, signed "A Small Farmer,"—querying why we should say so much about the exhaustion of the soil, under ordinary farming, when heavily timbered wild lands, supporting "a vegetation twenty times the bulk of any crop that is grown," are rather enriched thereby than impoverished. Hence, our correspondent is disposed to think that we should look to "some other quarter for the cause why lands in cultivation decrease in fertility." * * * If *A Small Farmer* has a cask of vinegar or molasses, and every time he draws a pint from the spigot, will pour it directly back into the bung, he will find the contents of the cask last him considerably longer than if he carries what is taken out of it to the table for consumption. The "wild timbered lands" not only have an annual dressing of their own leaves, perhaps heavier than any farmer manures, but the gradual decay of the trees, as by degrees they or their boughs fall down and mingle once more with the soil, returns to it even more than has been taken from it. All the elements this heavy growth has derived from the air as well as those it has taken from the earth, are in new forms deposited to support in turn another generation of vegetable life. Whereas in farming, there is a continual drawing off from the field of all it yields, or nearly all, and the expectation is in too many cases that this constant abstraction can be carried on forever without coming to an end. There are few casks so large that they have no bottom.

New Way of Marketing Pigs.—A Pennsylvanian merchant, having concluded to go to farming, says a correspondent of the *Boston Cultivator*, bought 75 acres of land near Lancaster, and, as he knew nothing of agriculture, save that he once fattened a pig, concluded to go into hog culture, pretty extensively. He accordingly erected extensive buildings, stocked them with the fashionable breeds, and now always has pigs for sale. The method by which he disposes of them, is, to offer to every purchaser the pick of his pigs without regard to age, size, or sex, at a certain price—say $5—with the condition of immediate payment and instant removal—never varying from these terms to reserve a pig, for even a quarter of an hour, though paid for. The plan works well—purchasers come freely, every one *has the best* and is satisfied, and many are willing to pay handsomely for a fancy taken to particular animals.

Old vs. New Corn, for Pork-making.—Conversing with an old farmer recently, he stated that one bushel of old corn, ground, was worth two bushels of new corn in the ear for making pork. That it is of superior quality we do not doubt, but think this estimate of the difference rather higher than facts will warrant. Some farmers feed new corn in preference to old—both in the unground raw state—thinking the grain, before it is fully hardened, more readily and fully digested, and sweeter, though perhaps not so oily in character. The point is worthy the consideration of our readers, and those who can, we hope will communicate their experience.

Feed for Cows.—A Maine dairyman finds clover much better than the low-land grasses for producing milk—testing the matter by accurate experiment. He says he never made as much milk with any kind of feed as with a mixture of oats and potatoes; the milk was also of good quality. Potatoes, it is well known, increase the quantity of milk at the expense of quality—perhaps oats are just the grain needed to make the amendment.

Weeds for Feeding Swine.—A lady farmer in New-Hamshire boils the weeds, which her little boys collect about the premises, then cuts them up and adds a little bran and the kitchen slops, and feeds the mixture to her pig. It likes the feed and thrives upon it, and she thinks that weeds thus boiled are worth as much as the same bulk of potatoes. It is very common to feed weeds to pigs, but we never heard of their being boiled for the purpose before. Many kinds, they eat heartily, raw, and any useful disposal of them is to bec ommended.

Large Sale of Ayrshires.—E. P. Prentice, Esq., of Mount Hope, near this city, contemplating a prolonged absence in Europe, last week disposed of nearly the whole of his well-known fine herd of Ayrshire cattle to Mr. William Birnie of Springfield, Mass. The purchase included twelve cows and heifers, all of Mr. P.'s own breeding, and the bull "Blossom," bred by Messrs. Hungerford and Brodie of Jefferson county—being the entire herd with the exception of two two-year-old bulls, which are still for sale. These cattle will be a valuable acquisition, even to the fine herds of the Connecticut river valley, whose superior stock, taken as a whole, it would be difficult to equal in any other section of the country.

Improved Stock for the South.—Mr. C. N. Bement of Poughkeepsie, recently shipped to Hon. E. R. Brown of Mount Hope, Miss., three beautiful Devon heifers, purchased of Mr. Vassar, and bred at Springside—a splendid South-Down ram from Mr. Thorne's flock at Thornedale, and a lot of fancy fowls from Springside.

Potato Planter.—Among the many agricultural implements exhibited at the late St. Louis Fair for the purpose of aiding the farmer in his laborious work of tilling the ground, we notice a "Potato Planter," made and shown by Messrs. Munn & Co. of Louisville. Mr. Young, a well-known correspondent of the horticultural press, and a practical farmer, says that in May, 1858, he planted two acres of potatoes and two acres of corn with this machine, and found a saving of eight hands in potatoes, and three hands in corn, to the acre. "Both have come up even, and stand as well, or better, than if planted by hand."

FARM IMPLEMENTS.—It is a prominent object of this paper to give reliable information in relation to any new or newly constructed farm implements, after a trial has been made with them. If therefore the manufacturers will forward to our associate at Union Springs, any such implements, he will give them a full practical trial, and if they prove valuable, their successful operation will be reported to the readers of this journal. If the implements are heavy, they may be sent by N. Y. Central R. R., and directed to Union Springs; but if small, they should be sent by Express, and directed, simply, "J. J. THOMAS, Auburn." All etters for Mr. Thomas should be addressed to "Union Springs, Cayuga Co., N. Y."

LARGE PURCHASE OF SHORT-HORNS.—JAMES O. SHELDON, Esq., of Geneva, has been, as our readers are already aware, for some time engaged in gathering the materials for a fine Short-Horn herd. His selections have been uniformly choice, and he has not been anxious to enlarge his operations, until the opportunity was afforded of procuring just that description of stock which should exactly suit his somewhat fastidious taste. Mr. S. purchased several head at Mr ALEXANDER'S last sale, and when at the State Fair we learnt that a still larger and more important addition to his herd was in contemplation. The particulars of the purchase we are now able to lay before our readers. It comprises the following animals, all from the the establishment of SAMUEL THORNE, Esq., of Dutchess county:—

Duke of Gloster, (11,382)—Bred by Earl Ducie, Totsworth Court, and purchased at the great Ducie sale in 1853, by Messrs. Morris & Becar—got by "Grand Duke" (10,284)—Dam Duchess 59th.

Duchess 64th—Bred by Thomas Bates, Kirkleavington, and purchased at the sale of the herd of the late Lord Ducie, in 1853, by Samuel Thorne, Esq.—got by 2nd Duke of Oxford, (9,040)—dam Duchess 55.

Duchess 71st—Bred by Messrs. Morris & Becar in England—got by the Duke of "Gloster," (11.382)—dam Duchess 66th.

2nd Duchess of Thorndale—dam Duchess 64th, by Young Balco, (12,462.)

Oxford 20th—Got by the Marquis of Carrabas—dam Oxford 5th.

Romior Oxford—Got by Romeo, (13,619)—dam Oxford 5th.

Bride of Oxford—Got by Marquis of Carrabas, (11,789)—dam Oxford 13th.

Gloster's Oxford—Got by the Duke of Gloster, (11,382)—dam Oxford 17th.

THE ADDRESS AT SYRACUSE.—Circumstances unavoidably prevented our being present during the delivery of the Address at the late State Fair, by Hon. JOSEPH R. WILLIAMS, President of the Michigan State Agricultural College. It was devoted to Agricultural Education, its necessity, its requirements, &c., and was an effort showing great research and deep thought upon the subjects involved,—fortifying its arguments by statistics and by incontrovertible facts. It was published simultaneously with its delivery in the Syracuse papers, and will form a valuable feature in the volume of Transactions in which it appears.

THE CONNECTICUT STATE FAIR.—The bad weather that has operated so adversely, a year or two past, to the pecuniary success of the Connecticut State Exhibitions, led to a general desire this year to make a grand show that could but place the Society once more "on its legs," and no better place for holding it perhaps could have been chosen with such an aim, than Hartford. The entries were very large in number, and the show of Horses and Cattle of different classes and breeds, was remarkably extensive and must have been very good. We notice the names of about 25 Short-Horn exhibitors, about 20 of Devons, and nearly 20 more under the head of Herefords, Ayrshires and Alderneys. The list of exhibitors in grades is a very long one, as is also that of Working Oxen. The show of fruit was very large, particularly of Apples, Grapes and Peaches. Unfortunately a heavy rain came upon Wednesday, which must have been a severe drawback, although it was concluded to continue the Exhibition through Saturday. We have not heard how the result turned out eventually, but hope that it was such as to encourage the officers of the Society to continue their praiseworthy exertions in its behalf.

RECENT COUNTY AND OTHER FAIRS.—We have accounts before us, through the press and otherwise, of the Fairs at Amherst, Northampton and Pittsfield in Massachusetts. Gov. BANKS delivered the address at the first, Dr. LORING at the second, and C. L. FLINT, Esq, at the last. Though the weather was generally rather unfavorable, these shows appear, especially the two former, to have been very well supported, and pretty largely attended. The Belchertown Town Fair, in the same State, is spoken of as having been very successful. From Pennsylvania we learn that the Chester County Show at West Chester, elicited a fine display and crowds of visitors. GEO. F. ROBERTS, Esq., was the orator of the occasion. We are a little surprised that in such a grand agricultural district, the local papers give no fuller reports of the County Shows. The Bucks County Fair was held at Newtown, and neither in the exhibition or attendance was there any flagging manifest upon the achievements of previous years. We note that much credit is given to the President, WM. STAVELEY, Esq., and other Managers for their zeal and exertions in contributing to a very successful result. The Fair of the Lancaster County Society occupied several days, and showed a gratifying advance upon last year in the public interest in this recently organized enterprise. The farmers of that thrifty region should yield most cordial support to an association of the kind.

MICHIGAN STATE AG. SOCIETY.—The annual election of officers for the Michigan Ag. Society, took place at the close of the recent fair held at Detroit. Col. CHARLES DICKEY of Marshall was chosen President. The Presidents of the County Societies in the State were made Vice-Presidents. Executive Committee—H G. Slygh, Wayne; A. S. Berry, Lenawee; James Bailey, Oakland; H. E. Degarmo, Ionia; H. G. Wells, Kalamazoo; Archibald Jewell, Cass; J. E. Kitton, St. Clair; D. C. Henderson, Allegan.

LARGE SQUASHES.—Mr. J. Henry Smith, a resident of Equinunk, harvested a few days since, 16 winter squashes, the united weight of which was 1958 1-2 lbs. Average weight 122 6-16 lbs. The largest one weighed 211 lbs., and measured 7 feet 9 1-2 inches in circumference—the second weighed 170 lbs., and the third 163 1-2 lbs. United weights of three largest squashes, 544 1-2 lbs—average 181 1-2 lbs. I think you will agree with me that the above proves Wayne Co. (Pa.) to be at least "some squash," if not "some pumpkins." PAUL S. PRESTON.

WHAT ENGLAND PAYS IN ONE YEAR FOR MANURE.—It is estimated that England pays annually three hundred millions of dollars for manure, more than the

entire commerce of that country. The total value of a year's crop has been reported to Parliament, some time ago, as being about three thousand millions of dollars—the crop includes the animal as well as the vegetable. The turnip crop has been estimated in that kingdom to be worth fifteen hundred millions of dollars.

MAY WHEAT.—MESSRS. EDITORS—I will advise farmers wishing seed of the *May wheat*, to know before purchasing whether it will sprout. Seeing in the Country Gentleman of 9th Sept. an offer to supply it, I sent to Buffalo for some; but although looking well, it will not grow, but has rotted in the ground where covered; and where the drag or later rains have left grains of it uncovered, they are sound but do not germinate. Whether the growers have killed the grain (purposely or otherwise,) by kiln drying, or that it has been heated in the bin, I cannot judge; but its vitality is destroyed in some way. W. T. L.

WEIGHT OF CORN.—I observe in the issue of Sept 30th, an inquiry respecting the proper weight of a bushel of corn on the cob. As the weight of the cobs is less in proportion to the grain in some varieties than in others, different weights of unshelled corn will be required to make a bushel of different varieties. Where it is desirable to determine the weight in any particular parcel, take a fair sample in the ear, weigh it, then shell it and weigh the grain; then as the weight of the grain is to the weight with the cobs, so is the standard weight of a bushel (57 or 60 as the case may be) to the weight of a bushel upon the cob of that parcel. A. W. C. *Plymouth, Pa.*

NUTTING'S PATENT GRAIN FANNING AND ASSORTING MACHINE.—

We have seen this fanning mill in operation several times, and believe it to be the best fanning and separating mill ever invented.—*New-England Farmer.*

We agree in the high opinion pronounced by our contemporary. See Mr. WARREN'S advertisement in another column. EDS. CO. GENT.

Fine Wheat and Good Yield.

EDS. CO. GENT.—Enclosed please find a sample of 'Blue Stem" winter wheat, weighing 63 pounds per bushel. I had four and seven-eighths acres, and harvested one hundred and fifty-five and one quarter bushels—or thirty-one bushels and twenty-seven quarts per acre, by measure—or 33 bushels and 13⅜ quarts by weight, (60 pounds per bushel)

The land was a gravelly loam, somewhat inclining to clay in spots. In 1847 it yielded 8 8-10th bushels of wheat per acre, but by sowing plaster and turning under clover, it has reached its present fertility. I sowed clover seed on it in March last, but the cold wet rains in May, followed by the unprecedented hot weather in June, and the very rank growth of wheat, killed the clover; consequently I have again sowed the field to wheat. Last year I sowed one-half the field broadcast and drilled the other half. This year I drilled the whole. It *pays* to drill.

I have sold some of this wheat to our millers for flouring, at $1 44 per bushel of 60 lbs. Club Spring wheat is worth $1 12½. Oats 50 cents. Corn 75 cents Dairy butter 20a22 cents. Dairy pork $3.75 per 100, live weight. No fruit of any consequence except grapes—and grasshoppers! These have destroyed at least half of the corn crop in this county. D. A. A. NICHOLS. *Westfield, N. Y.*

Now Ready—Single copies Twenty-five Cents postpaid—One Dozen copies $2. Agents Wanted in all parts of the country, to whom liberal terms will be offered.

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FOR 1859.

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For Beauty of Illustrations, (total 144,) Variety and Value of Contents, it will be conceded that No. 5 of the REGISTER is unsurpassed by either of its predecessors. The Publishers desire to suggest that it offers peculiar inducements, from its cheapness and usefulness, for circulation, either gratuitously or otherwise, by Agricultural and Horticultural Societies, Nurserymen, Dealers in seeds and Implements, and all interested in the Progress and Improvement of the Farmer.

Address all orders or inquiries for the Terms at wholesale to LUTHER TUCKER & SON,
Cultivator Office, Albany, N. Y.

THE EXCELSIOR HORSE POWER TRIUMPHANT WHEREVER IT GOES. The above machine has just been awarded the FIRST PREMIUM AT THE NEW-YORK STATE FAIR at Syracuse, where it came into competition with all other Horse Powers in the country. The Proprietor has constantly on hand a supply of these machines, together with THRESHERS and SEPARATORS, CIDER MILLS, SAW MILLS, CLOVER HULLERS, and all other machines adapted to the power. All orders addressed to the subscriber promptly attended to. RICH. H. PEASE,
Oct. 14—w4tm2t. Albany, N. Y.

SUPERIOR BULBOUS ROOTS AND PÆONIES, Tulips, Japan and other Lilies, Crown Imperials, Fritillarias, Polyanthus Narcissus, Double Roman and other double and single Narcissus, Jonquils, Star of Bethlehem, Gladiolus, Iris, Crocus, Arums, Squills, Anemones, Ranunculus, Cyclamens, Amaryllis, Dyelytras, Babianas, Achimenes, Lachenalias, Oxalis, Tygridias, Tuberoses, Hæmanthus, Snowflake, &c., as per special Bulbous Catalogue. Pæonies, 12 varieties, 25 cents each. Chinese Herbaceous Pæonies 12 varieties, 25 to 30 cts. each. Tree Pæonies, many varieties, all on own roots (*none grafted,*) $1 to $2 each. The prices will in all cases be as low, and many lower than elsewhere obtainable; and we will supply any assortments at the lowest rates offered in any regular advertisement.

N. B. A General Priced List of Fruit Trees, and all the Small Fruits, including 136 *varieties of* Native Grapes, with greatly reduced prices, just issued. Descriptive Strawberry Catalogue of 130 varieties. The Catalogues of any department are sent to applicants who enclose stamps Linnæan Gardens and Nurseries, Flushing, N. Y.
Oct. 14—w2tm1t. WM. R. PRINCE & CO.

PEASE & EGGLESTON, Proprietors of Agricultural Warehouse and Seed Store, No. 84 State-street, Albany, N. Y., received the following named first premiums at the Fair of the Albany County Agricultural Society just closed:

Best Reel and Cistern Pump, Dip. & $3; Dog and Sheep Power for churning, Dip. & $2; Garden Roller, $1; Road Scraper, $1; Churn, $1; Stalk and Hay Cutter, $1; Corn Planter, for horse or hand use, $1; 6 Manure Forks, $1; 6 Shovels and Spades, $1; 3 Grain Cradles and Scythes, $1; Collection of Horticultural Implements, Dip. & $3; Portable Cider Mill and Wine Press, Dip. $3; Corn Sheller for Power, Dip. & $3; Corn Stalk and Hay Cutter do. Dip. & $3; Green Sward, Dip. & $3; Mold and Stubble Plow, Dip. $3; 2 Horse Plow for general use, Dip. & $3; Subsoil Plow, Dip. & $3; 1 Horse Cultivator, Dip. $2; 2 Horse Cultivor, Dip. & $2; Thresher and Cleaner, Dip. & $5; Clover Mill and Cleaner, Dip. & $5; Potatoe Planter, Potatoe Hilling Machine, Coulter Harrow, 2 Horse Harrow, very highly recommended.

We have lately connected with our regular business a Stove Department and offer the following named well-known Stoves at very low prices: Young Warrior, Black Prince, City Air Tight, Sunny-Side, Little Dorritt, Golden Egg, &c., and respectfully solicit a share of the trade in this line. PEASE & EGGLESTON,
Oct. 7—w4tm1. 85 State-street, Albany, N. Y.

R. NUTTING'S FANNING AND ASSORTING MACHINE.—The increasing necessity for such a machine as the above, has long been apparent to even the most casual observer—and for this reason, it meets with the *practical* approval of every intelligent farmer wherever it is introduced; in fact no real farmer can afford to be without it, if he values his reputation as such, and desires to sow only clean and perfect seed. Any person or manufacturer who desires to make a change in, or addition to, his business, or engage in something substantial and profitable, cannot do better than in the manufacture of this machine. A more particular description of it will be found in the "Co. Gent." of Sept. 9th, 1858.

All applications for territory in any part of the United States, (the New England States excepted,) must be made to WALLACE WARREN,
Sept. 16—w&mtf. Utica, N. Y.

PRINCE ALBERT POTATOES.

FOR SALE—The Prince Albert Potatoes is admitted by all who have grown it the present season to be the best yielder and best table potatoe that they have grown; and out of sixteen varieties which I have grown this season on the Farm of J. A. Horton, Esq., we have found the Prince Albert to be the best. Not having a sufficiency last spring to supply the demand, we are now ready to fill all orders at the following prices:

Price per Barrel of three Bushels, ... $4.00
" " two bushels, ... 3.00
" " single bushel, ... 1.50

The above prices include all packing, and will be delivered at the Sussex R. R. Depot at Newton, as may be directed, or forwarded by Express. Address

GERALD HOWATT,
Manager to J. A. HORTON,
Oct. 7—w1tm1t. Newton, Sussex Co., New-Jersey.

ANDRE LEROY'S NURSERIES,

At ANGERS, FRANCE.

The proprietor of these Nurseries—the most extensive in Europe—has the honor to inform his numerous friends and the public, that his Catalogue of Fruit and Ornamental Trees, Shrubs, Roses, Seedlings, Fruit Stocks, &c., for the present season, is now ready and at their disposition.

The experience which he has acquired in the last ten years, by numerous and important invoices to the U. S., and the especial culture which he has established for that market, upon an area of over 300 acres, are for his customers a sure guarantee of the proper and faithful execution of their orders.

Apply as heretofore to F. A. BRUGUIERE, 138 Pearl Street, New-York, his sole Agent in the U. S.

NOTE.—All advertisements or circulars bearing the name of Leroy, Angers, must not be considered as emanating from our house, if they do not at the same time mention that Mr. F. A. BRUGUIERE is our Agent. Address F. A. BRUGUIERE, New-York.

Sep. 2—w&m4m. ANDRE LEROY, Angers, France.

WILSON'S ALBANY SEEDLING.—

The best and most prolific Market Strawberry! Yields 150 to 200 Bushels per Acre!—I am prepared to sell plants of this superior variety in large or small quantities. The fact that the Strawberries of this kind, marketed by me the present season, were the best and largest sold in Albany, is a sufficient guarantee of the thrift and quality of the plants. Price, delivered in Albany, $10 a thousand—$1.50 a hundred, or $1.00 for fifty. Orders accompanied by cash promptly attended to.

Address WM. RICHARDSON,
96 South Pearl Street,
July 22—m&wtf. Albany, N. Y.

TO PRACTICAL FARMERS AND DEALERS IN FERTILIZERS.—The NATIONAL FERTILIZER,

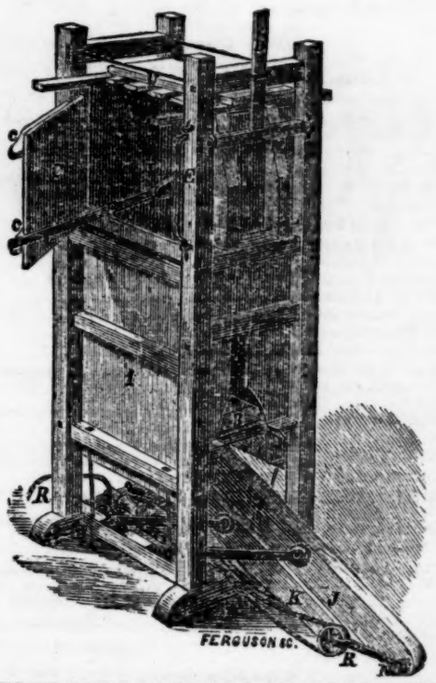
a modern compost, is prepared under the direct superintendence of **L. Harper, L. L. D.**, formerly Professor of Analytical Chemistry and Agriculture in the State University of Mississippi, as also State Geologist. Its **basis** is the **Green Sand Marl** of New-Jersey, which is chemically combined with fish and pure animal bone. Letters Patent for this and foreign countries have been granted. It is unhesitatingly accredited **superior** to Peruvian Guano—strengthening the soil and beyond the possibility of exhausting land where applied. **The increase in the yield of plants and all cereals is largely augmented**; while it supplies a **continuous** source of Fertility. **For sandy, barren and abandoned lands,** and where **other** manures have failed, we ask **but one trial**, trusting **solely** upon the **rare** constituents which this fertilizer abundantly possesses, and which are **so wholly and peculiarly essential** in an article of fertility, such as is here **reliably** represented. We would beg the attention of Farmers to its use the coming autumn for winter grain, and to the fact that it has arrested the **rot** in potatoes **after** decay has commenced. Price per ton of 2,000 lbs., $35. For all detailed particulars, analyses, directions and recommendations, apply or send to the office of the National Fertilizing Company, 37 Fulton St, New-York.

JOS. C. CANNING, Agent.

We would distinctly give notice, [as abortive imitations and attempted infringements upon our patents have already been made,] that we have **no connection whatever** with other Fertilizing Companies of **any character or name.** Aug. 19—w&m3mos.

Downing's Fruit and Fruit Trees,

JUST PUBLISHED, and for sale at this office—sent by mail postpaid, at $1.75.



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Aug. 19—w&mtf

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IT IS estimated the AYER'S CHERRY PECTORAL and CATHARTIC PILLS have done more to promote the public health than any other one cause. There can be no question that the Cherry Pectoral has by its thousands on thousands cures of Colds, Coughs, Asthma, Croup, Influenza, Bronchitis, &c., very much reduced the proportion of deaths from consumptive diseases in this country. The Pills are as good as the Pectoral and will cure more complaints.

Everybody needs more or less purging. Purge the blood from its impurities. Purge the bowels, liver and the whole visceral system from obstructions. Purge out the diseases which fasten on the body, to work its decay. But for disease we should die only of old age. Take antidotes early and thrust it from the system, before it is yet too strong to yield.

Ayer's Pills do thrust out disease, not only while it is weak but when it has taken a strong hold. Read the astounding statements of those who have been cured by them from dreadful Scrofula, Dropsy, Ulcers, Skin Diseases, Rheumatism, Neuralgia, Dyspepsia, Internal pains, Billious Complaints, Heart-burn, Headache, Gout, and many less dangerous but still threatening ailments, such as Pimples on the face, Worms, Nervous Irritability, Loss of Appetite, Irregularities, Dizziness in the Head, Colds, Fevers, Dysentery, and indeed every variety of complaints for which a Purgative remedy is required.

These are no random statements, but are authenticated by your own neighbors and your own Physicians.

Try them once, and you never will be without them.

Price 25 cents per Box—5 boxes for $1.00.

Prepared by Dr. J. C. AYER, Chemist, Lowell, Mass., and sold by all respectable Druggists everywhere.

March 11—w1am—mtf.

LINSLEY'S

ESSAY ON THE ORIGIN, HISTORY AND CHARACTERISTICS OF MORGAN HORSES.
By D. C. LINSLEY—Price $1.

Contents of this Number.